

# ISO 14090:2019 (E)

## Adaptation to climate change — Principles, requirements and guidelines

---

### Contents

|       |                                                                        |
|-------|------------------------------------------------------------------------|
|       | Foreword                                                               |
|       | Introduction                                                           |
| 1     | Scope                                                                  |
| 2     | Normative references                                                   |
| 3     | Terms and definitions                                                  |
| 4     | Principles                                                             |
| 4.1   | General                                                                |
| 4.2   | Change-oriented perspective                                            |
| 4.3   | Flexibility                                                            |
| 4.4   | Mainstreaming and embedding                                            |
| 4.5   | Robustness                                                             |
| 4.6   | Subsidiarity                                                           |
| 4.7   | Sustainability                                                         |
| 4.8   | Synergy between adaptation and mitigation of climate change            |
| 4.9   | Systems thinking                                                       |
| 4.10  | Transparency                                                           |
| 4.11  | Accountability                                                         |
| 5     | Pre-planning                                                           |
| 6     | Assessing climate change impacts including opportunities               |
| 6.1   | General                                                                |
| 6.2   | Impact assessment methods                                              |
| 6.2.1 | General                                                                |
| 6.2.2 | Risk assessment                                                        |
| 6.2.3 | Vulnerability assessment                                               |
| 6.2.4 | Thresholds analysis                                                    |
| 6.3   | Assessing adaptive capacity                                            |
| 6.4   | Identifying opportunities                                              |
| 6.5   | Identifying uncertainties                                              |
| 7     | Adaptation planning                                                    |
| 7.1   | General                                                                |
| 7.2   | Policy, strategy and planning context                                  |
| 7.3   | Decision-making                                                        |
| 7.3.1 | General                                                                |
| 7.3.2 | Identification of climate change adaptation actions                    |
| 7.3.3 | Decision-making approaches                                             |
| 7.3.4 | Short, medium and long lifespan decisions                              |
| 7.4   | Adaptation plan                                                        |
| 7.4.1 | General                                                                |
| 7.4.2 | Scope of the plan and boundaries of the system                         |
| 7.4.3 | Baselines                                                              |
| 7.4.4 | Climate change information                                             |
| 7.4.5 | Impacts                                                                |
| 7.4.6 | Adaptive capacity                                                      |
| 7.4.7 | Climate change adaptation actions                                      |
| 7.4.8 | Implementation, monitoring and evaluation, reporting and communication |
| 7.4.9 | Interested parties' engagement                                         |

|                |                                                                                             |
|----------------|---------------------------------------------------------------------------------------------|
| <b>8</b>       | <b>Implementation</b>                                                                       |
| 8.1            | Leadership and commitment                                                                   |
| 8.2            | Implementation plan                                                                         |
| <b>9</b>       | <b>Monitoring and evaluation</b>                                                            |
| <b>10</b>      | <b>Reporting and communication</b>                                                          |
| <b>Annex A</b> | <b>(informative) Using systems thinking to set boundaries for climate change adaptation</b> |
| A.1            | Systems thinking — The concept                                                              |
| A.2            | Systems thinking — Benefits                                                                 |
| A.3            | Interconnections, dependencies and interdependencies                                        |
| A.4            | Mapping and identifying boundaries and sub-systems                                          |
| A.5            | Practical examples for Figure A.2                                                           |
| <b>Annex B</b> | <b>(informative) Thresholds analysis</b>                                                    |
| B.1            | Thresholds analysis — The concept                                                           |
| B.2            | Steps in thresholds analysis                                                                |
| B.2.1          | Characterize the system                                                                     |
| B.2.2          | Research possible climate changes                                                           |
| B.2.3          | Identify thresholds                                                                         |
| B.2.4          | Assess resilience                                                                           |
| B.2.5          | Identify suitable indicators                                                                |

Page count: 28