

## CONTENTS

EMERGENCY PREPAREDNESS AND RESPONSE .....	1
<b>3. INTRODUCTION .....</b>	<b>1</b>
<b>3.1. INITIAL RESPONSE IN JAPAN TO THE ACCIDENT .....</b>	<b>4</b>
3.1.1. Relevant EPR arrangements in Japan prior to the accident.....	4
3.1.2. Identification, notification and activation in response to the accident.....	10
3.1.3. Mitigatory actions .....	13
3.1.4. Management of the off-site response.....	18
3.1.5. Summary .....	24
3.1.6. Observations and lessons .....	25
<b>3.2. PROTECTING EMERGENCY WORKERS .....</b>	<b>26</b>
3.2.1. Relevant arrangements in Japan prior to the accident.....	29
3.2.2. Protection of personnel at the NPP following the earthquake and tsunami .....	30
3.2.3. Protective measures for emergency workers.....	30
3.2.4. Medical management of emergency workers.....	38
3.2.5. Voluntary involvement of members of the public in the emergency response .....	42
3.2.6. Summary .....	42
3.2.7. Observations and lessons .....	43
<b>3.3. PROTECTING THE PUBLIC.....</b>	<b>44</b>
3.3.1. Arrangements for protecting the public in Japan prior to the accident .....	44
3.3.2. Urgent protective actions .....	48
3.3.3. Early protective actions.....	60
3.3.4. Use of the dose projection model SPEEDI as a basis for decisions on protective actions during the accident.....	71
3.3.5. Environmental monitoring .....	74
3.3.6. Public information .....	84
3.3.7. International trade .....	93
3.3.8. Waste management in the emergency.....	94
3.3.9. Summary .....	96
3.3.10. Observations and lessons .....	99
<b>3.4. TRANSITION FROM THE EMERGENCY PHASE TO THE RECOVERY PHASE AND         ANALYSES OF THE RESPONSE.....</b>	<b>101</b>
3.4.1. Transition from the emergency phase to the recovery phase .....	101
3.4.2. Analyses of the response.....	108
3.4.3. Summary .....	116
3.4.4. Observations and lessons .....	117
<b>3.5. RESPONSE WITHIN THE INTERNATIONAL FRAMEWORK FOR EMERGENCY         PREPAREDNESS AND RESPONSE.....</b>	<b>117</b>
3.5.1. International EPR framework for a nuclear or radiological emergency prior to the accident.....	117
3.5.2. IAEA response.....	129
3.5.3. Protective actions recommended to foreign nationals within Japan .....	147
3.5.4. Response of international organizations .....	148
3.5.5. Provision of international assistance.....	155
3.5.6. Summary .....	157
3.5.7. Observations and lessons .....	159

APPENDIX I. KEY DOCUMENTS AND ELEMENTS THAT DEFINED THE NATIONAL EPR SYSTEM FOR RESPONSE TO A NUCLEAR EMERGENCY IN JAPAN PRIOR TO THE ACCIDENT .....	161
APPENDIX II. RADIATION AND DISASTER EMERGENCY MEDICAL SYSTEMS IN JAPAN PRIOR TO THE ACCIDENT .....	169
APPENDIX III. PLANS FOR EMERGENCY DRILLS AND EXERCISES PRIOR TO THE ACCIDENT .....	171
REFERENCES .....	173
CONTENTS OF CD-ROM.....	188
ABBREVIATIONS .....	189
CONTRIBUTORS TO DRAFTING AND REVIEW .....	192
INTERNATIONAL TECHNICAL ADVISORY GROUP .....	195
MEETINGS .....	196