Assurance and regulation of RAS

1. Defining required behaviour

1.1 Identifying hazards
   1.1.1 Defining system scope
   1.1.2 Defining the operating environment
   1.1.3 Defining operating scenarios

1.2 Identifying hazardous system behaviour
   1.2.1 Considering human/machine interactions

1.3 Defining safety requirements
   1.3.1 Validation of safety requirements

1.4 Impact of security on safety
3. Understanding and controlling deviations from required behaviour

3.1 Identifying potential deviation from required behaviour
   - 3.1.1 Identifying sensing deviations
   - 3.1.2 Identifying understanding deviations
   - 3.1.3 Identifying deciding deviations
   - 3.1.4 Identifying acting deviations
   - 3.1.5 Identifying infrastructure deviations
   - 3.1.6 Identifying ML deviations
   - 3.1.7 Interaction deviations
   - 3.1.8 Human/machine interactions

3.2 Mitigating potential deviations
   - 3.2.1 Managing failures of ML components
   - 3.2.2 Managing assurance deficits

PROJECT COVERAGE KEY

- no coverage
- partly covered
- well covered
Assurance and regulation of RAS

4. Gaining approval for operation of RAS

4.1 Conforming to rules and regulations

4.1.1 Identifying applicable rules and regulations

4.1.2 Understanding the requirements of rules and regulations

4.2 Risk acceptance

4.2.1 Evaluating risks and benefits of RAS operation

4.2.2 Consideration of ethical issues

4.3 Provision of sufficient confidence in the required behaviour

4.4 Provision for investigation of incidents and accidents