



**WATER SERVICES ASSOCIATION  
OF AUSTRALIA**

# Domestic Smart Water Meter Specification

Version 1.1  
13 December 2010

## TABLE OF CONTENTS

|      |  |
|------|--|
| 1    | Document Control                               |
| 1.1  | Version History                                |
| 1.2  | Quality Reviewers                              |
| 1.3  | Related Documents                              |
| 2    | Introduction                                   |
| 2.1  | Background                                     |
| 2.2  | Purpose  |
| 2.3  | Scope  |
| 2.4  | Future proofing                                |
| 2.5  | Further development of this Specification      |
| 2.6  | Technology trial                               |
| 3    | Communications Architectures                   |
| 3.1  | General  |
| 3.2  | Utility private HAN on smart electricity meter |
| 3.3  | NAN connection to SWMs                         |
| 3.4  | Standalone                                     |
| 3.5  | Migrating between architectures                |
| 4    | SWM Configurations                             |
| 4.1  | Mandatory requirements                         |
| 4.2  | Other SWM configurations                       |
| 4.3  | Optional components                            |
| 5    | General Requirements                           |
| 5.1  | Application                                    |
| 5.2  | Compliance with Standards                      |
| 5.3  | Physical requirements                          |
| 5.4  | Measurement and recording                      |
| 5.5  | Radio  |
| 5.6  | Design life                                    |
| 5.7  | Real time clock                                |
| 5.8  | Battery  |
| 5.9  | Digital display                                |
| 5.10 | Local optical communications port              |
| 5.11 | Data storage and memory                        |
| 5.12 | Magnetic tamper detection                      |
| 5.13 | Operation in absence of remote communications  |

|     |                                  |
|-----|----------------------------------|
| 6   | Data Communications requirements |
| 6.1 | Compliance                       |
| 6.2 | Secure joining to an ESI         |
| 6.3 | Mirroring of an SWM              |
| 6.4 | Configuration settings           |
| 6.5 | Status recording                 |
| 6.6 | Alarms detection and recording   |
| 6.7 | Volume of water based Reporting  |
| 6.8 | Time based reporting             |
| 6.9 | Firmware upgrade                 |
| A   | Glossary                         |