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Foreword

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Introduction

Many IT environments involve broadcast communication, in which one sender communicates with multiple receivers. Securing such communication is a non-trivial task. Broadcast authentication protocols aim to enable the recipient to verify the authenticity of transmitted data and ensure entity authentication of the sender.

A straightforward way of achieving broadcast authentication is to use digital signatures, as for example described in the ISO/IEC 9796 series or ISO/IEC 14888 series. However, there are situations in which the additional communication and computational overhead of digital signatures are prohibitively expensive, as can be the case with satellites broadcasting to earth.

This document specifies lightweight broadcast authentication protocols, which offer a significantly lower implementation cost than deploying digitial signatures as a solution to the authentication of broadcast communication.