



# Introduction to EPCglobal's Discovery, Configuration and Initialisation (DCI) Standard Version 1.0

June 10, 2009



- Overview - Discovery Configuration and Initialisation
- Why Adopt DCI
- Some of the Details on DCI Functions

# Overview – Discovery Configuration and Initialisation

DCI Version 1.0 is a software standard for the Discovery, Configuration and Initialisation of RFID Readers, created by the same SAG Reader Operations Working Group that developed Lower Level Reader Protocol (LLRP) to ensure architectural and technical consistency and applicability for all target platforms.

- Specifies a new device, called an Access Controller, which performs several DCI functions.
- References IETF Control and Provisioning of Wireless Access Points (CAPWAP), which was developed from the protocol that is already in use in large and small wireless access point deployments around the world

## Why adopt DCI?

- The design of DCI is driven by a number of well-specified end-user network architectures
- DCI brings complete solution for scalable device discovery, firmware management, and configuration functions to the RFID user community
- DCI leverages an existing, directly-applicable, standards effort that will also see wide deployment
- Implementation experience part of EPCglobal process and source code available

## Some of the Details on DCI Functions

- DCI provides standardized means to allow:
  - A reader to discover one or more Access Controllers
  - An Access Controller to discover one or more readers
  - Readers to discover one or more Clients
  - A reader and Access Controller to exchange identity information and authenticate that identity information
  - A Client and an Access Controller authenticate their communications and operations
- DCI provides standardized means for the Access Controller to:
  - Configure the reader, including a means to update the software and/or firmware on the reader
  - Initialize the reader, providing parameters necessary for the reader to begin operation