

Open Charge Point Protocol

- History
- Achievements
- Members
- Current Organisation
- Processes
- Planning
- Lessons Learned
- Activities



History

2009:

- Foundation e-laad
- First charging stations in The Netherlands (simple socket outlet, access with a key)
- Interoperability (e.g. charge card)
- Recognition of the need for 'some kind of' protocol for communication between charging station and backend system
- Start of development of a protocol, together with partners from the EV infrastructure branche:
 - Alfen
 - Logica
 - Ihomer

History

2010

- First OCPP version (1.2) meant for 'own' use by e-laad to communicate between Charging Station and Backend System
- Implemented by e-laad and Charge Station Manufacturers Reewoud and Alfen
- Minimum attention and development
- Simple website with specs, software and documentation free available. Several companies showing interest in the documentation.
- Appeared to be: 'an accidental succes'

History

2011:

- First OCPP Technical Workshop (+/- 25 participants from NL, EU)
- Goal: international branche information > input for further development of OCPP (functional, management and organisation)
- New organisation structure and Change Request process started
- First development of OCPP 1.5

History

2012

- Release of OCPP version 1.5 (release date: June 2012)
- Brainstorming about release OCPP 2.0, with important subjects(Smart Charging...)
- Start of Standardisation Process
- Professionalised communication e.g. new logo+website, twitter, etc

Achievements

- OCPP has become the standard when it comes to charging station to backend communication!
- 700 registrations
- +/- 50 different countries worldwide
- +/- 200 different organisations and companies
- OCPP organisation structure
- Change request process
- Technical support
- Simulation Software regarding implementation (stubs)
- Development from 1.2 to 1.5 (reservations, detailed status information, energy measurement)
- Creating Draft release 2.0 (in progress)

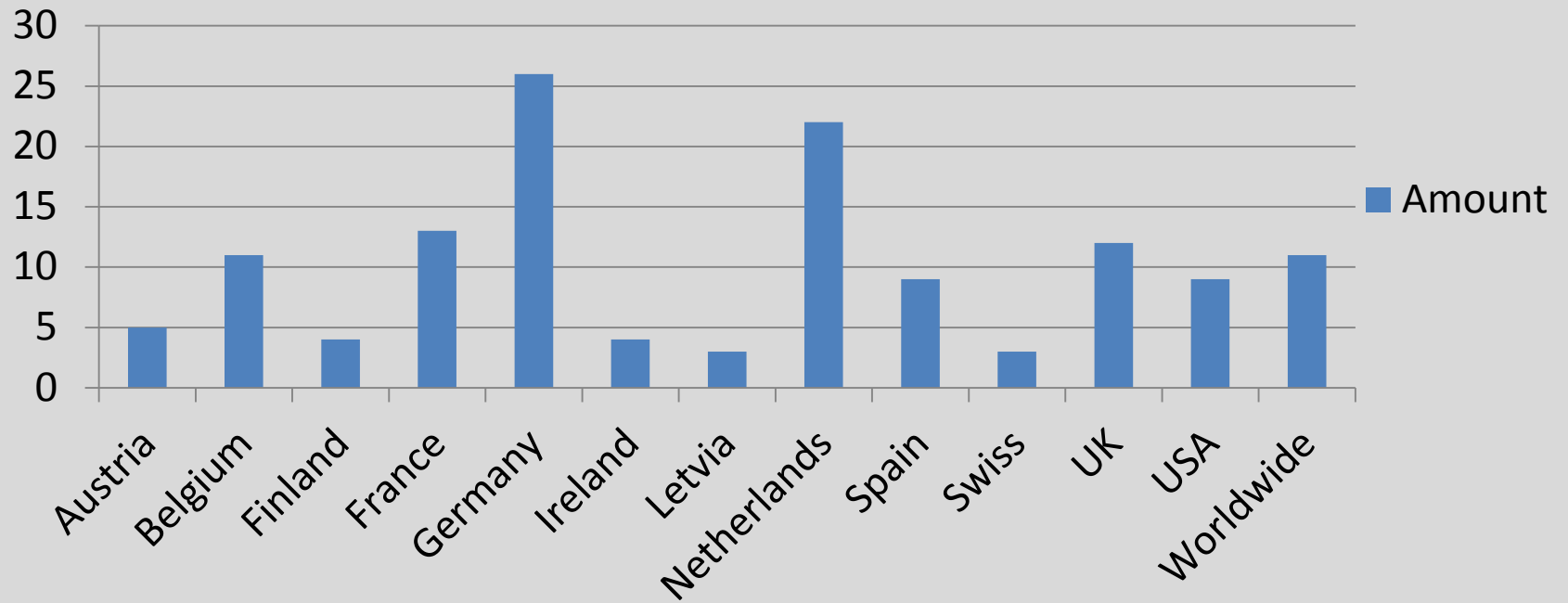
OCPP.

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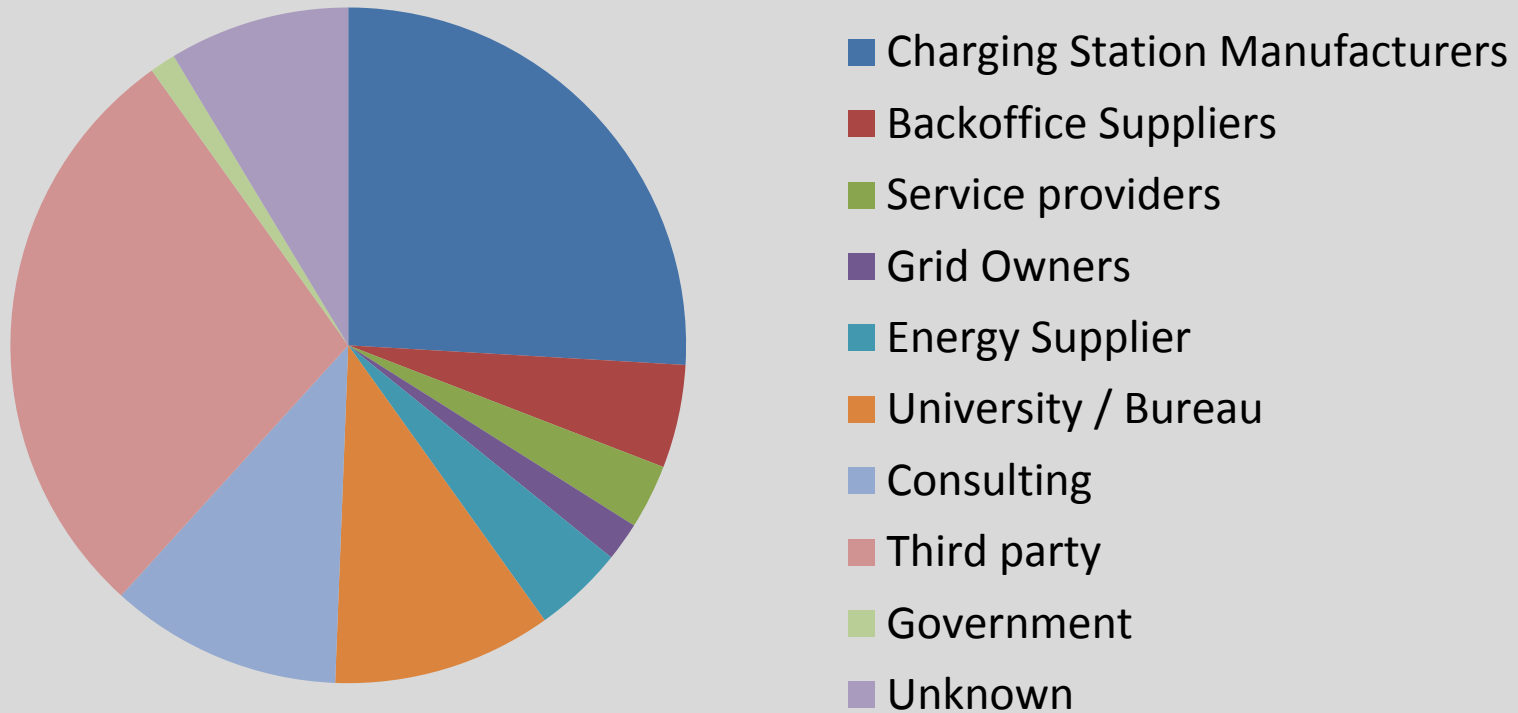
Members

- Steering Group analysed 250 OCPP members

Members



Interest in OCPP



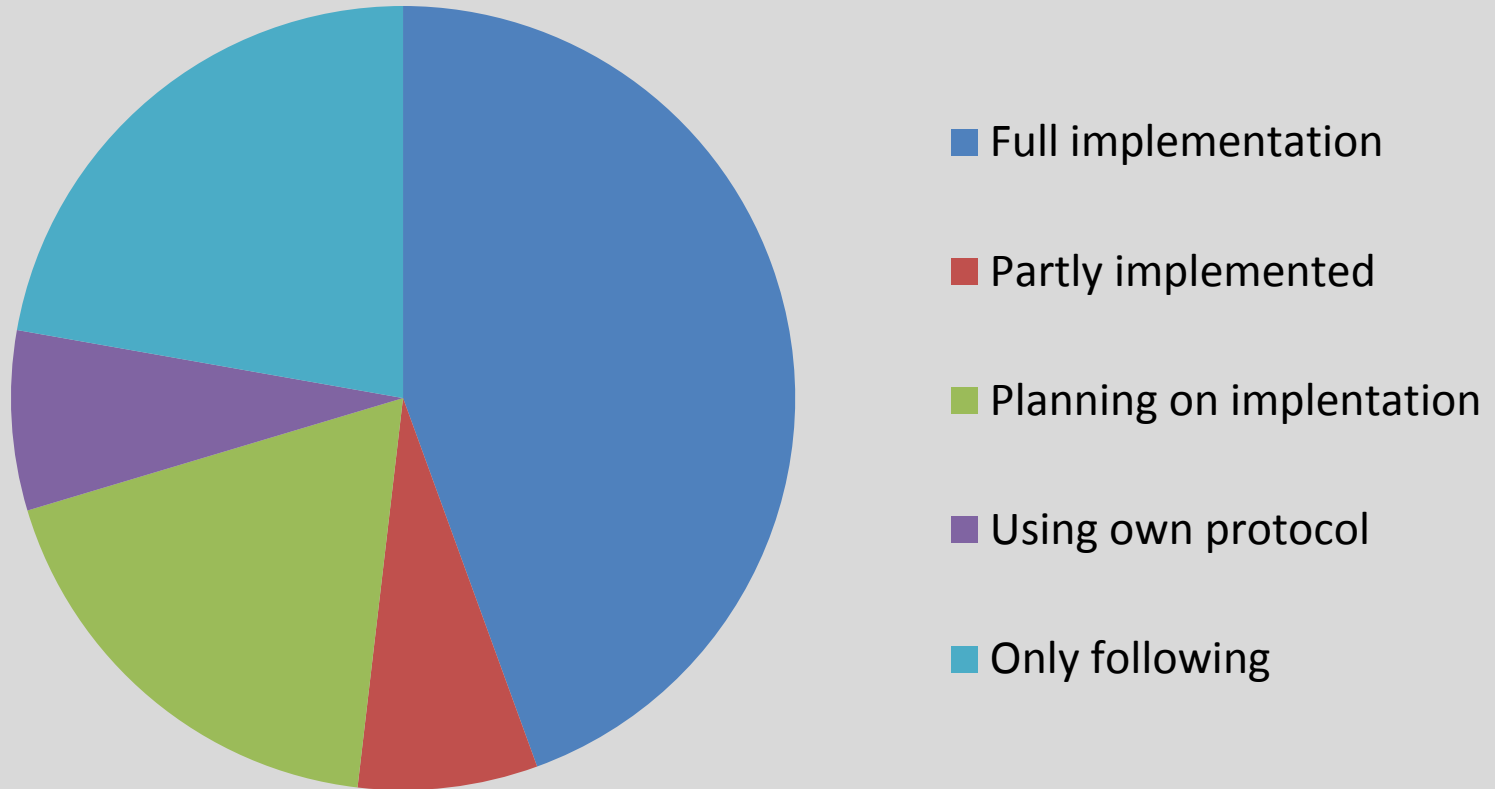
Members

Third party



- Hardware Supplier
- Car anufacturer
- Telecom
- Parking Solutions
- Other

Implementation OCPP



Members

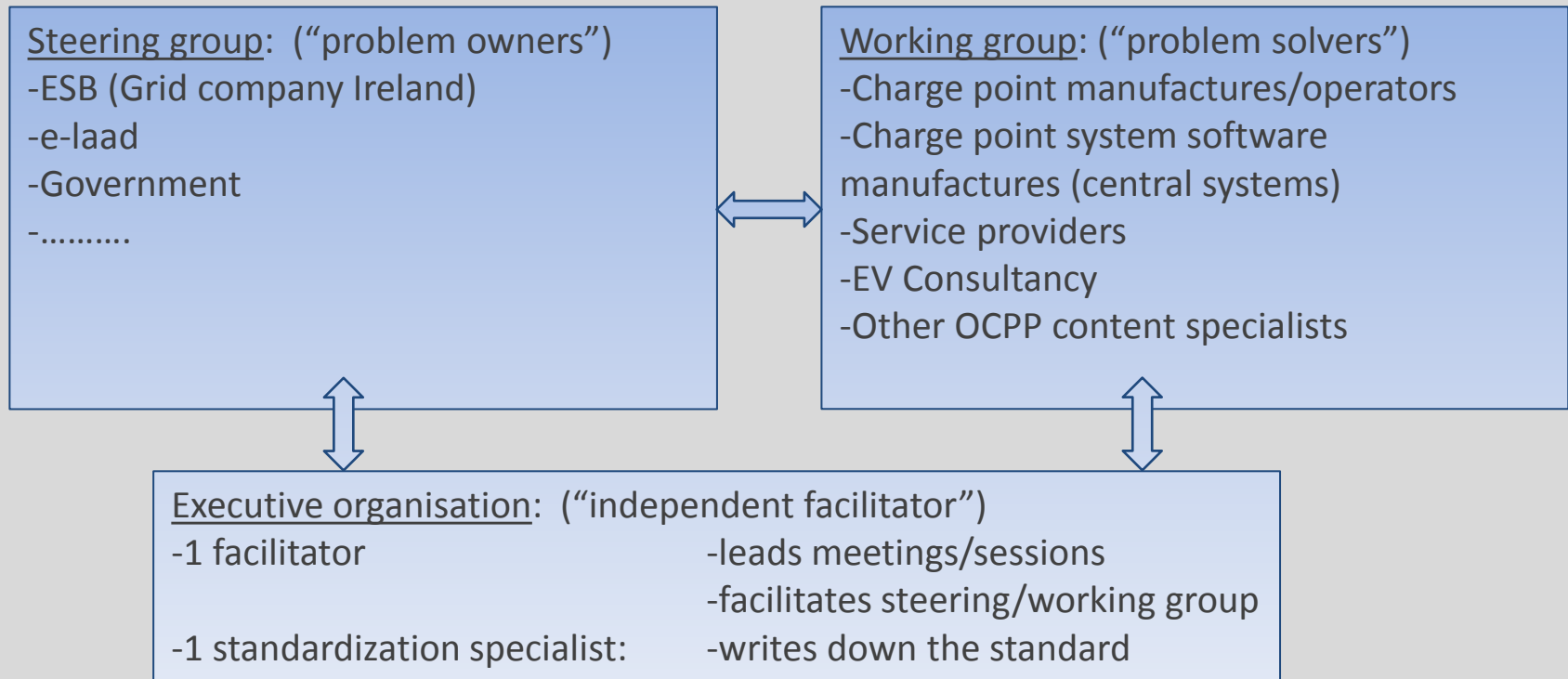
Reactions:

- ‘OCPP is a full grown protocol’
- ‘Offers new opportunities’
- Implemented because of the stimulation of interoperability
- Widely supported, also major players showing their interest

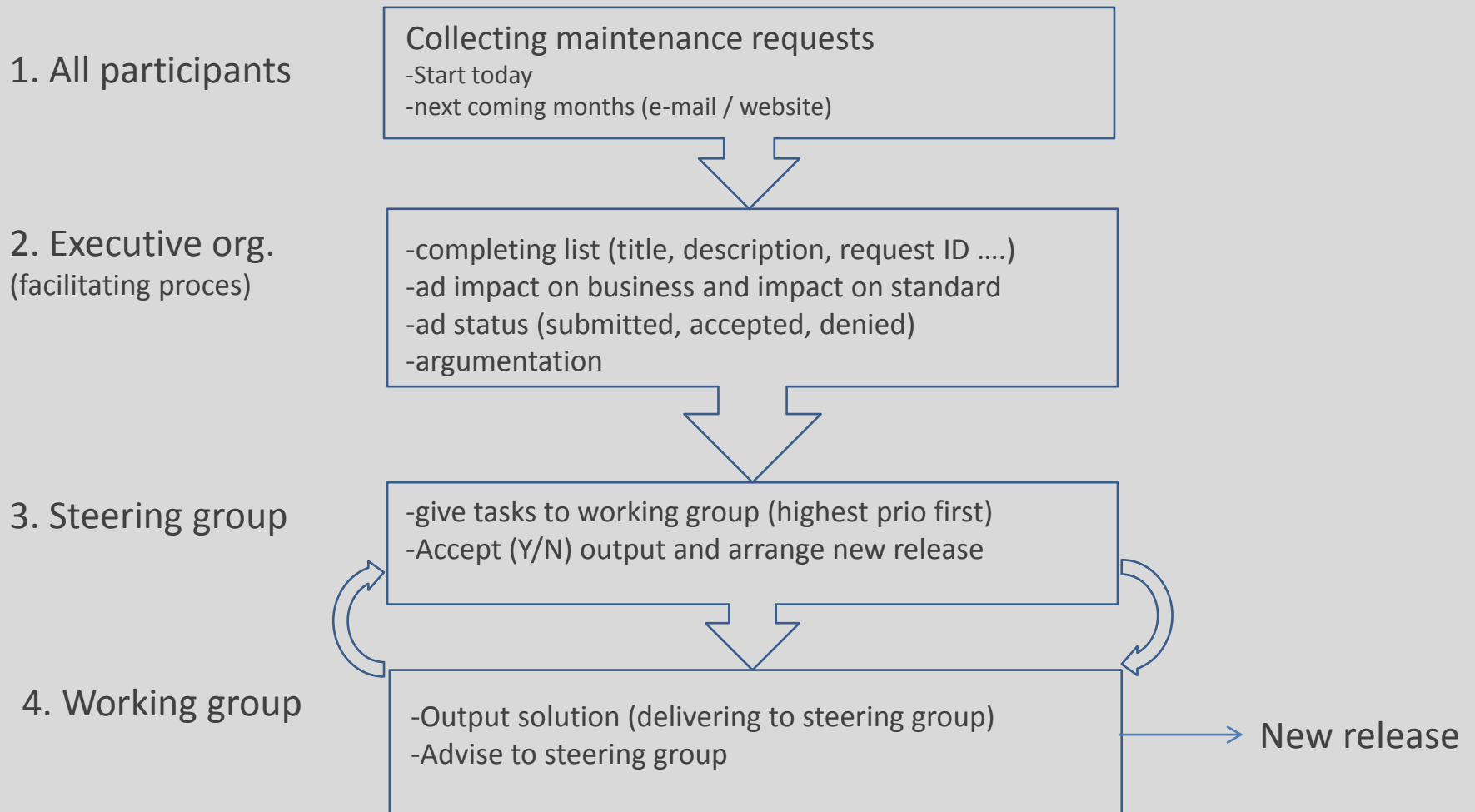
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Current organisation



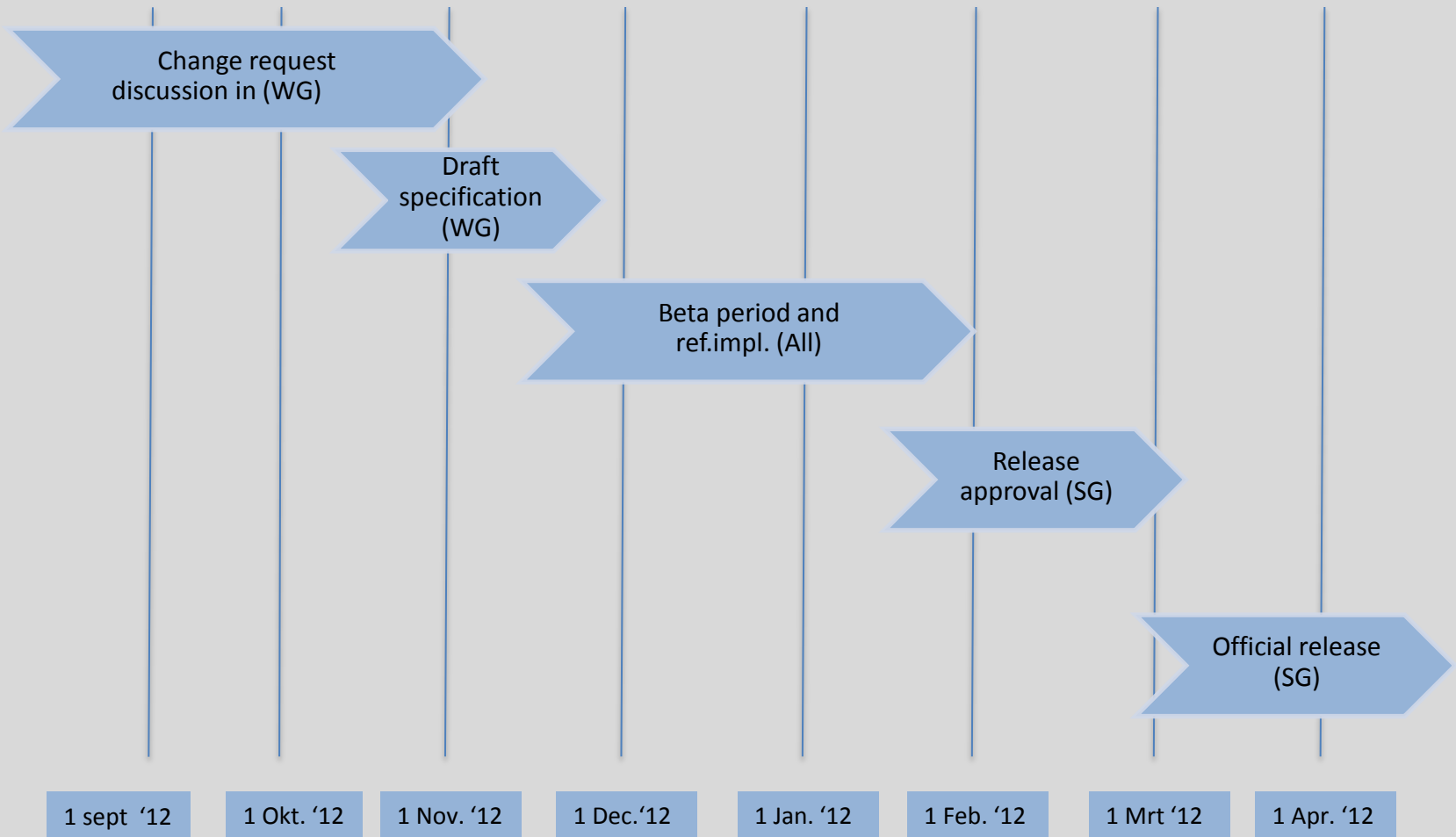
Change request proces



Working Group Process

- Steering group (SG) makes inventory of Change Requests
- SG defines working group (WG) assignments
- SG defines WG (and Sub-WG's) for each assignment
- WG carries out assignment resulting in:
 - Concrete solutions for items where consensus has been reached
 - Hand-back of non-consensus items to SG
- SG defines new WG for non-consensus items

Timeline 2.0 release..



Lessons learned..

- Reference implementation
- Positive feedback to workshop release 1.5
- Small groups more productive
- More and better communication of progress
- Release 1.5 trial → More time needed for 2.0

Topics of Working Group

- Smart charging
- Transport mechanisms
- Compliancy
- Miscellaneous issues
- Diagnostics

OCPP Activities

OCPP

Development

- workshops
- CR's
- creating UC's
- writing of protocol
- WSDL files
- testing
- software
- release

Operational

- Communication
- support desk
- promotion
- website
- coordination
- Organizing SG
- Organizing WG

Strategic

- Organisation in 2013
- Finance
- Standardization
- future of OCPP

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OCPP: interface between Charge Point and a Back-end System

Authorize

Boot Notification

Diagnostics Status Notification

Firmware Status Notification

Heartbeat

Meter Values

Start Transaction

Status Notification

Stop Transaction

Change Availability

Change Configuration

Clear Cache

Get Diagnostics

RemoteStartTransaction

RemoteStopTransaction

Reset

Unlock Connector

Update Firmware

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Current issues

- Standardisation
- Financial
- Increasing amount of members>how to keep tech. workshops manageable