



# 6TiSCH



## IETF 100 - Singapore

Chairs:

**Pascal Thubert**

**Thomas Watteyne**

Etherpad: <https://etherpad.tools.ietf.org/p/notes-ietf-100-6tisch>

## IPv6 over the TSCH mode of IEEE 802.15.4

# Note Well

Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:

- The IETF plenary session
- The IESG, or any member thereof on behalf of the IESG
- Any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices
- Any IETF working group or portion thereof
- Any Birds of a Feather (BOF) session
- The IAB or any member thereof on behalf of the IAB
- The RFC Editor or the Internet-Drafts function

All IETF Contributions are subject to the rules of [RFC 5378](#) and [RFC 8179](#).

Statements made outside of an IETF session, mailing list or other function, that are clearly not intended to be input to an IETF activity, group or function, are not IETF Contributions in the context of this notice. Please consult [RFC 5378](#) and [RFC 8179](#) for details.

A participant in any IETF activity is deemed to accept all IETF rules of process, as documented in Best Current Practices RFCs and IESG Statements.



A participant in any IETF activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.

# Reminder:

Minutes are taken \*

This meeting is recorded \*\*

Presence is logged \*\*\*

- \* Please contribute online to the minutes at: <https://etherpad.tools.ietf.org/p/notes-ietf-100-6tisch>
- \*\* Recordings and Minutes are public and may be subject to discovery in the event of litigation
- \*\*\* Please make sure you sign in the blue sheets



# Administrivia

- Minutes
  - Etherpad: <https://etherpad.tools.ietf.org/p/notes-ietf-100-6tisch>
- Remote participation
  - Meetecho: <http://www.meetecho.com/ietf100/6tisch>
  - Jabber: [6tisch@jabber.ietf.org](mailto:6tisch@jabber.ietf.org)
- Mailing list
  - [6tisch@ietf.org](mailto:6tisch@ietf.org)
  - To subscribe: <https://www.ietf.org/mailman/listinfo/6tisch>
- Meeting materials:
  - <https://datatracker.ietf.org/meeting/100/materials.html/#6tisch>
  - One set of slides per presentation

# Agenda



## Intro and Status (chairs)

[10min]

- Agenda Bashing
- Milestones
- State of 6TiSCH

## Chartered items

- draft-ietf-6tisch-6top-protocol (*Xavi Vilajosana*) [10min]
- draft-ietf-6tisch-minimal-security (*Malisa Vucinic*) [15min]
- draft-ietf-6tisch-dtsecurity-zero-touch-join (Michael Richardson) [10min]
- draft-ietf-6tisch-6top-sfx (*Diego Dujovne*) [05min]

## Unchartered items, time permitting

- draft-chang-6tisch-msf (*Tengfei Chang*) [15min]
- draft-satish-6tisch-6top-sf1 (*Bing Liu - Remy*) [10min]
- draft-richardson-6tisch-roll-join-priority (Michael Richardson) [05min]

## Any Other Business?

[10min]

# Milestones

## Milestones

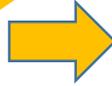
Date	↕ Milestone
Dec 2018	6TiSCH architecture and terminology in RFC publication queue
Dec 2018	Evaluate WG progress, propose new charter to the IESG
Nov 2018	Initial submission of 6TiSCH architecture to the IESG <a href="#">draft-ietf-6tisch-architecture</a>
Oct 2018	Initial submission of draft-ietf-6tisch-dtsecurity-zerotouch-join to the IESG <a href="#">draft-ietf-6tisch-dtsecurity-zerotouch-join</a>
Oct 2018	Initial submission of 6TiSCH terminology to the IESG <a href="#">draft-ietf-6tisch-terminology</a>
Feb 2018	Initial submission of draft-ietf-6tisch-minimal-security to the IESG <a href="#">draft-ietf-6tisch-minimal-security</a>
Oct 2017	Initial submission of draft-ietf-6tisch-6top-sf0 to the IESG
 Done	Initial submission of draft-ietf-6tisch-6top-protocol to the IESG <a href="#">draft-ietf-6tisch-6top-protocol</a>
Done	ETSI 6TiSCH #3 plugtests
Done	WG call to adopt draft-ietf-6tisch-6top-sublayer <a href="#">draft-ietf-6tisch-6top-protocol</a>
Done	WG call to adopt draft-ietf-6tisch-6top-sf0
Done	Second submission of draft-ietf-6tisch-minimal to the IESG <a href="#">draft-ietf-6tisch-minimal</a>

# State of 6TiSCH

we have a complete “Minimal 6TiSCH” solution!

- 6tisch-minimal (RFC8180)
- 6tisch-minimal-security
- 6tisch-minimal-scheduling-function
- RPL (RFC6550)
- 6LoWPAN (RFC6282)

you can now go build  
6TiSCH products



External focus: supporting market adoption

Performance evaluation: *Is 6TiSCH the right technology for my application?*

open-source implementation support:

- OpenWSN
- Contiki-NG
- 6TiSCH simulator
- RIOT

Performance evaluation and benchmarking

Conformance and interop testing  
([www.f-interop.eu](http://www.f-interop.eu))

Internal focus: further technology developments

ongoing work

Additional SFs:

- draft-ietf-6tisch-6top-sfx\*
- draft-duquenooy-6tisch-asf
- draft-satish-6tisch-6top-sf1\*

Security:

- draft-ietf-6tisch-dtsecurity-zerotouch-join\*

RPL and EB optimizations:

- draft-richardson-6tisch-roll-join-priority\*
- richardson-6tisch-join-enhanced-beacon
- DIO and EB merge
- Fast re-route

draft criteria for extending the Minimal 6TiSCH solution:

1. *what problem does this extra specification solve?*
2. *how much better does a network run with this new specification?*
3. *how much larger is the footprint on the node?*