# Alliance for Private Networks - MFA

## Working Procedures
### *February 1, 2018*

Alliance for
private networks

MFA

Keywords

**MulteFire Alliance**

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# Contents

# Foreword

These Working Procedures of the MulteFire Alliance are effective from February 1, 2018.

An electronic version of these Working Procedures is available on MFA ARO.

MulteFire Alliance gratefully acknowledges that this document is an adaptation of the publicly available 3GPP Working Procedures document dated December 31, 2014 and obtained from http://www.3gpp.org/specifications-groups/working-procedures as a WinZipped Word document.

# Section A:   General

# Article 1:   Description

The MulteFire Alliance is a California 501(c)(6) non-profit corporation.

# Article 2:   Purpose

Support the common interests of members, developers and users in the application of Long Term Evolution (LTE) and next generation mobile cellular technology with configurations that use only unlicensed and shared spectrum. Areas of business focus include enterprise & industrial access and IoT networks and neutral host solutions.

# Article 3:   Scope and objectives

The MulteFire Alliance scope and objectives are:

- Develop technical specifications and technical reports, where technical specifications include not only interface and interoperability specifications, but also includes interoperability testing specifications, conformance testing specifications, and specifications, policies and procedures in support of a corresponding certification program.

# Section B: Participation

# Article 4: Categories

Participation in MulteFire Alliance shall be classified into one of the following categories:

- Members:

   – Sponsor Member;

   – Non-Profit Sponsor Member;

   – Full Member;

      - Non-voting Participants;

   – Adopter;

   – Test Lab / Test Equipment;

      - Authorized Test Lab (ATL)

# Article 5: Sponsor Member

Sponsor membership in MulteFire Alliance is open to Full Members and is subject to approval by the Board of Directors. The number of Sponsor Members is limited to a maximum of ten (10) in the Bylaws.

Sponsor Member voting is on a one vote per Sponsor Member basis and is eligible to hold leadership positions such as Chair and Vice Chair positions.

# Article 6: Non-Profit Sponsor Member

Non-Profit Sponsor membership in MulteFire Alliance is open to Full Members and is subject to approval by the Board of Directors, based on the Non-Profit Sponsor Member criteria and conditions adopted by the Board. The number of Sponsor Members is limited to a maximum of two (2) in the Bylaws. Non-Profit Sponsor Member voting on a one vote per Non-Profit Sponsor Member basis and is eligible to hold leadership positions such as Chair and Vice Chair positions.

# Article 7: Full Member

- Full Membership in MulteFire Alliance is subject to approval by the Board of Directors. The Board delegated such authority to the Executive Committee.

- Full Member can contribute technically or otherwise to one or more of the Working Groups within the MulteFire Alliance scope;

- Full Member can use the MulteFire Alliance results to the extent feasible.

Representatives (i.e., employees, contractors) of a Full Member have the right to participate in the work of MulteFire Alliance by attending meetings of the Working Groups and subtending groups.

Full Member voting is on a one vote per Full Member basis and is eligible to hold leadership positions.

# Article 8:    Non-voting participants

Non-voting participants shall be classified into one of the following four categories:

- Adopter;

- Test Lab / Test Equipment;

- Authorized Test Lab (ATL)

# Article 9:    Adopter

- Adopter status in MulteFire Alliance is open and voluntary to an established corporate, governmental or similar legal entity (i.e., not to an individual person), and subject to approval by the Board of Directors. The Board delegated such authority to the Executive Committee.

- Adopter members can use or to enable the use of the MulteFire Alliance results to the extent feasible.

Representatives (i.e., employees, contractors) of an Adopter do not have the right to participate in the work of MulteFire Alliance by attending meetings of the Working Groups and subtending groups that are engaged in the drafting of technical specifications, interoperability test specifications, conformance test specifications, and certification program specifications, policies and procedure documents.  Adopter access is limited to adopted MulteFire Alliance results (i.e., not working drafts).

Representatives of Adopters may receive documents and contribute documents for information of non-technical Working Groups, such as a Marketing Work Group, but shall not submit documents that propose changes to the specifications, reports, work item descriptions, work plan, or any other document under the control of the MulteFire Alliance.

Adopter is a non-voting class and is not eligible to hold any leadership positions.

# Article 10:    Test Lab / Test Equipment

- Test Lab / Test Equipment membership in MulteFire Alliance is subject to approval by the Board of Directors. The Board delegated such authority to the Executive Committee.

- Test Lab / Test Equipment members can use or to enable the use of the MulteFire Alliance results to the extent feasible as a provider of market-based certification and testing services.

Representatives of Test Lab / Test Equipment members may receive documents and contribute documents for information, but shall not submit documents that propose changes to the specifications, reports, work item descriptions, work plan, or any other document under the control of the MulteFire Alliance.

Test Lab / Test Equipment is a non-voting class and is not eligible to hold leadership positions.

# Article 11:    Authorized Test Lab (ATL)

To become an Authorized Test Labs Participant, one must first join as a Test Lab Participant.

Following requirements must be met:

- Join MulteFire Alliance as a Test Lab Participant in good standing

- Seek ISO 17025 accreditation for MFA test spec(s) from an International Laboratory Accrediting Cooperation (ILAC) Accrediting Body

- Obtain appropriate test equipment and/or systems for the desired scope of accreditation

- Provide appropriate training and build competence in the desired MFA scope of testing among their personnel (for example, via MFA test events)

- Complete all business and membership agreements with the MFA

- Submit to an on-site audit by MFA Lab Manager/Certification Authority (CA

Authorized Test Lab is a non-voting class and is not eligible to hold leadership positions

# Section C:   Structure

# Article 12:   Structure of MulteFire Alliance

MulteFire Alliance consists of a Board of Directors (Board), Executive Committee, Certification Working Group (CWG), Marketing Working Group (MWG) and a Technical Specification Group (TSG). TSG may establish Working Groups (WG) if required.

# Article 13:   Board of Directors

The number of Directors in MulteFire Alliance's board of directors is not less than three (3) and not more than fourteen (14). There will be at least two (2) and not more than twelve (12) Directors, each designated by their respective Sponsor Member or Non-Profit Sponsor Member. If there are less than three (3) Members that are Sponsor Members or Non-Profit Sponsor Members, then each Sponsor Member and Non-Profit Sponsor Member shall designate three (3) Directors. There shall be at least one (1) and not more than two (2) Directors elected by the Full Members.

# Article 14:   Board of Directors Collective Responsibilities

MulteFire Alliance Bylaws specify a set of statutory obligations and rights for the Board.  In addition, the MulteFire Alliance Bylaws grant the Board ultimate authority over all MulteFire Alliance activities which are interpreted to include among others the following tasks:

- determine the general policy and strategy of MulteFire Alliance in the form of an approved and maintained statement of MulteFire Alliance Vision, Mission and Strategic Objectives;

- establish committees, working groups;

- take decisions on the creation or cessation of TSGs, and approving their scope and terms of reference;

- management of the MulteFire Alliance Secretariat and related support functions;

- allocation of human and financial resources provided by the MulteFire Alliance membership to the MulteFire Alliance;

- the official adoption of MulteFire Alliance technical specifications, interoperability test specifications, conformance test specifications, and certification program policies, procedures and specification documents;

- acting as a body of appeal on procedural matters referred to them;

- Approve MulteFire Alliance Working Procedures and officially adopt revisions proposed by the Executive Committee;

- maintenance of the register of those eligible to participate in MulteFire Alliance;

- maintenance of the register of IPR declarations relevant to MulteFire Alliance, received by the MulteFire Alliance.

# Article 15:    Executive Committee

Executive Committee consists of all the current officers, and assigned Directors. The Officers are the Chair of the Board, the President, the Secretary and the Treasurer.

Executive Committee is led by the President. The President is the general manager and chief executive officer of the Corporation. The President is responsible for managing, directing, supervising and controlling day-to-day operations and performing such other duties and exercising such other powers as the Board may assign.

The Secretary keeps the minutes of the meetings of the Board. The Secretary is responsible of the corporate records. Other duties may be assigned to the Secretary by the President or by the Board

The Treasurer supervise the charge and custody of all funds of MulteFire Alliance. The Treasurer will keep and maintain accounts of properties and business transactions.

All Working Groups report to the Executive Committee.

# Article 16:    Groups

The Board may create one or more groups, task groups or working groups. Appointments and authorizations of groups is described in the Bylaws section 6.6.

All Working Groups report to the Executive Committee.

# Article 17:    Certification Working Group

Certification Working Group's (CWG) tasks are:

- Design, implementation, execution and management of a product certification program

- Develop Certification Program Management Document, including procedures for Authorized Test Labs, Test Requirements Status List, etc.

- Coordination point for Test Lab Manager

- Coordination point for Certification Authority

- Program Manage Test Environment and Test Equipment procurement

# Article 18:    Marketing Working Group

Marketing Working Group's (MWG) tasks are:

- Design, implementation, execution and management of overall Strategic Marketing program

- External facing Marketing Communications, Press Relations, Brand Strategies, Event planning

- Develop Marketing collateral, including visuals, web, messaging

- Coordination point for Strategic Marketing Communications Agency

- Coordination point with Technical Specification Group

- Product management type functions applicable to the task of developing technical specifications

Principle outputs are:

- A Multiple Releases Specification Development Roadmap

- Market Requirements Documents Release

- Interface with Technical Working Group

- Balance Release scope, schedule and resources to meet marketing feature and timing requirements

# Article 19:    Technical Specification Group

The Technical Specification Group's (TSG) scope and charter:

- Central venue for member technical contributions in support of technical specification drafting and related deliverables

- Drafting of Technical Requirements Document in response to Marketing Requirements Document

- Drafting of Technical Specifications in response to Technical Requirements Documents, including but not limited to End-to-End Architecture Aspects, Radio Aspects, Self-Organizing Network (SON) Aspects, and Conformance and Interoperability Aspects

The TSG's tasks are:

- Proposes to the Board for appointment TSG Chair and Vice Chairs based on election results;

- Creation of TSG Working Groups and approval of their terms of reference;

- When a new Working Group is created, the appointment of TSG Working Group Chair;

- Allocation of resources within the TSG;

- Allocation of voluntary human and financial resources provided by MulteFire Alliance membership;

- Handling of appeals from members on technical matters;

- Preparation of a detailed timeframe and management of detailed work progress;

- Management of work items;

- Technical Coordination;

- Proposal and approval of work items within the agreed scope and terms of reference of the TSG;

- Where a work item is outside the scope of the MulteFire Alliance, but a common global solution is desired, recommend an approach to the Board;

- Maintenance of the list of those eligible to vote within the TSG (Voting Members).

# Section D: Working in TSG and WGs

# Article 20:   TSG participation

The following shall have a right to participate in the TSGs:

- Representatives of Sponsor Members;

- Representatives of Non-Profit Sponsor Members

- Representatives of Full Members;

- Representatives of Authorized Test Labs

- Representatives of Test Labs / Test Equipment;

- Representatives of Liaison Agreements (subject to scope of agreement related number of participants limits, and meeting attendance fees (if any));

# Article 21:   TSG and WG election of Chair and Vice Chair

## 21.1         TSG elections

TSGs and WGs can decide their own composition if not otherwise instructed by the Board.

The TSG Chair and Vice Chair are elected by the TSG from amongst the TSG representatives.

In the case where there is more than one candidate for TSG or WG Chair or Vice Chair, and no consensus is reached, a secret ballot shall be used. For interpreting the result of the secret ballot, the following procedure shall apply:

When, in the first ballot, no candidate has obtained 71% of the votes cast, a second ballot shall be held. In the second ballot, in cases where there are only two candidates, the candidate obtaining the higher number of votes is elected. In cases where there are more than two candidates, if none of them has obtained 71% of the votes, a third and final ballot shall be held among the two candidates who have obtained the highest number of votes in the second ballot. The candidate obtaining the higher number of votes in the third ballot is then elected.

Following election by the TSG, the TSG Chair and Vice Chairs shall be appointed by the Board on the proposal of the TSG. The appointment will be for 2 years. After this period, if the TSG Chair/Vice Chair wishes to continue and there are no other candidates for the positions, their appointment is confirmed for another 2 years. If other candidates wish to take the positions, then elections are conducted as described in this section.

The Vice Chairs election will be held during the 2018 Annual Meeting for the second 2-year term (dates and locations TBD).

The Chairs election will be held during the 2019 Annual Meeting for the second 2-year term (dates and locations TBD)

## 21.2         WG Chair and Vice Chair elections

The provisions concerning the election of WG Chairs and Vice Chairs shall be as for TSG Chair and Vice Chair as defined in 21.1 above, changing TSG to WG wherever TSG is mentioned, with the following differences.

WG elections shall also be held when an existing Chair or Vice Chair resigns. WG elections need not be synchronized within the WG (i.e. elections for Chair and each Vice Chairs may occur at different times), across different WGs of the same or other TSGs.

Following election by the WG, the Chair and Vice Chair hold office immediately, without need of appointment by TSG.

# Article 22:   TSG and WG Chair and Vice Chair responsibilities

The TSG Chair is responsible for the overall management of the technical work within the TSG and its Working Groups. The Chair has an overall responsibility to ensure that the activities of the TSG follow the Working Procedures.

The WG Chair is responsible for the overall management of the technical work within the WG and its sub-groups.

The Chair may nominate officials to assist in the work.

The Chair may delegate tasks to the Vice Chair.

The Chair may be assisted by the MulteFire Alliance Secretariat.

Recognizing the need to balance the requirement of rapid specification development with the limited resources of delegates, the Chair should encourage a minimum number of meetings, especially parallel meetings, and maximize the use of electronic means to advance the work.

In performing their leadership role, the Chair and Vice Chair shall maintain impartiality and act in the interests of MulteFire Alliance.

At the commencement of each meeting of a TSG or WG, the group shall be reminded that:

(i) compliance with all applicable antitrust and competition laws is required;

(ii) timely submissions of work items in advance of TSG or WG meetings are important to allow for full and fair consideration of such matters; and

(iii) the leadership will conduct the meeting with impartiality and in the interests of MulteFire Alliance.

# Article 23:   TSG and WG Chair and Vice Chair dismissal

A secret ballot shall be taken for the proposal to dismiss a TSG or WG Chair or Vice Chair because of a failure to effectively perform their duties, if requested by 30% of the TSG or WG membership list. 71% of the votes cast are required to recommend dismissal.

The Board shall dismiss a Chair or Vice Chair on the proposal of the TSG.

# Article 24:   TSG and WG decision making

TSG and WGs shall endeavour to reach consensus on all issues, including decisions on Technical Specifications and Technical Reports. Informal methods of reaching consensus are encouraged (e.g., a show of hands). If consensus cannot be achieved, the Chair can decide to take a vote.

It is the responsibility of the Chair to ensure that questions to be voted upon are phrased in a positive yes/no manner, with 71% required to approve the question. Questions should not be phrased as the TSG shall not do

something. Examples of appropriate questions are; Shall the TSG approve the Specification? Shall the liaison be approved? Shall the new WI be approved? Shall the existing WI be stopped? If the issue is to choose option A or B, the question should be split into two questions, with the Chair selecting the order. First, shall the TSG take option A as the way forward? If this question fails the second question is, shall the TSG take option B as the way forward?

Contributions on which decisions will be based should be made available in good time before each meeting. TSG may establish informal guidelines for dealing with late contributions.

Working Agreements may be used to establish tentative agreements in cases where consensus cannot be obtained. The working agreement process is described in Annex D.

# Article 25:    TSG and WG voting during a meeting

The following procedures apply for voting during a TSG or WG meeting:

- before voting, a clear definition of the issues shall be provided by the Chair;

- Voting Members shall only be entitled to one vote;

- Voting Member means Sponsor Member, Non-Profit Sponsor Member or Full Member;

- if a Voting Member has more than one representative present, only one representative may vote;

- each Voting Member may only cast the vote once;

- each Voting Member may carry proxy votes for up to five other Voting Members. All proxy votes shall be accompanied by a letter of authority from the authorising Voting Member. Proxies will not be considered when determining the quorum; the quorum required for voting during a TSG or WG meeting shall be 30% of the total number of Voting Member companies on the TSG or WG voting list;

- a proposal shall be approved when the percentage of positive votes is at least 71% of the votes cast

- the result of the vote shall be recorded in the meeting report.

- If the TSG cannot resolve the matter, it will be escalated to the President who will submit it for Board review via email.

# Article 26:    TSG and WG Voting Membership List

## 26.1            Voting list

Each TSG and WG shall maintain a list of Members eligible to vote in that group.

The voting list shall be used to establish quorum and for determining those eligible to take part in a vote.

Note 1:          The term "membership list" has no particular significance in the context of TSG and WG meetings. The term "attendance list" is used for a list of individuals who attend a given meeting representing a Member or other entity entitled to participate in meetings – see Annex C.

## 26.2 On creation of new TSG or WG

When a new TSG or WG is formed, a Member is added to the voting list at the first meeting at which it is represented, and may vote at the second meeting where it is represented.

Exceptionally, if inadequate notice (less than the period of time given in article 31) had been given for the first meeting of the new group, a Member shall be added to the voting list on its delegate's attending the second meeting (the election meeting) and vote at that meeting even if it had not been represented at the group's first meeting.

Only a Member that had been represented at the group's first meeting may provide a proxy for the second meeting.

## 26.3 Established TSGs and WGs

To qualify for the voting list, it is necessary for at least one delegate of a Member to attend at least two meetings of the group concerned, without being removed according to the provisions of article 35. 4.

A Member having been represented at least two ordinary meetings of the group has the right to cast a vote by proxy (see article 25). Thus, a Member may not cast a vote by proxy during a meeting at which it is not represented unless it had already been represented at two or more qualifying meetings of the group.

## 26.4 Removal from and reinstatement to voting list

A Member which is not represented at three consecutive meetings of the TSG or WG shall be removed from the voting list.

The right to vote is reinstated at the second meeting which a delegate of the Member attends without missing the number of consecutive meetings mentioned in the previous paragraph (but see article 35.3 for eligibility to cast a proxy vote).

Example 1: If Member Z is represented at meeting K and K+3 (and is thus eligible to vote) but is not represented at meetings K+4, K+5 and K+6, it is removed from the voting list.

Example 2: If Member X, not previously having been represented at a meeting of the group, is represented at meetings N and N+3, it may cast a vote at meeting N+3.

Note: Member X might choose to cast a vote by proxy at meeting N+3, even though its delegate is physically present.

Example 3: If Member Y, not previously having been represented at a meeting of the group, is represented at meeting N only, it may not cast a vote by proxy at meeting N+2.

## 26.5 Meetings other than ordinary meetings

Any group that wants to call an electronic meeting (audio, video, document distribution by posting or e-mail, etc.) may do so, although this works best with smaller groups. Therefore, all electronic meetings are allowed but only ordinary meetings (see annex C) count towards attendance. However, if a meeting is designated as face-to-face, provision of bridge and speakerphone capabilities for those requesting it would be at the discretion of the host. Those participating by speakerphone are not to be counted toward quorum or attendance, and are not allowed to vote.

# Article 27: Quorum

Where calculation of a quorum is required in the context of a vote conducted in a TSG or a WG, the quorum shall be deemed to have been met if:

$(B – P) / V >= Q$

Where:

- B is the number of eligible Members;

- P is the number of proxy votes exercised

- V is the number of Members having the right to vote at the meeting (including those with only the right to vote "in person" and not by proxy);

- Q is the quorum value. In order to have quorum, Q needs to be greater than or equal the required quorum value given in Article 25.

# Article 28:    TSG or WG voting by correspondence

The following procedures apply for voting by correspondence:

- before voting, a clear definition of the issues shall be provided by the Chair and disseminated to all on the TSG or WG membership list;

- Voting Members shall only be entitled to one vote;

- Voting Member means Sponsor Member or Full Member;

- each Voting Member may only cast the vote once within the voting period;

- the voting period shall be 30 days;

- there are no quorum requirements;

- The result of the vote shall be disseminated to the TSG or WG.

# Article 29:    TSG or WG appeal process

A Member of MulteFire Alliance who opposes a Chair's ruling on a vote taken within a TSG or WG may submit its case to the Executive Committee for Board consideration. In such cases the Member shall also inform the relevant TSG or WG Chair.

When a TSG or WG Chair has made a ruling, his decision shall be taken as the basis for future operations, unless or until overturned by the Board.

If a Member in a TSG or WG believes that a Chair or Vice Chair of any such group is acting without impartiality and not in the interests of MulteFire Alliance, such Member may object to such actions within the relevant group, and may request that such objection be recorded in the minutes of the applicable group meeting and it shall be so recorded. The objecting Member may ultimately take its objection to the Board for consideration.  In such cases the Member shall also inform the relevant TSG or WG Chair.

# Article 30:    TSG and WG meetings

TSGs and WGs shall meet as necessary to complete their work within the prescribed timeframe. TSGs should endeavour to hold their meetings at the same time and place to assist in the overall co-ordination of the work.

Meeting locations should reflect the geographical diversity of the TSG and WG delegates.

Further information on meetings is given in annex C.

# Article 31:   TSG and WG meeting invitation

The invitation to a TSG or WG meeting and the necessary logistical information should be disseminated as soon as practically possible, considering the need to obtain travel documentation. It shall be disseminated at least 28 days before the meeting to all on the TSG or WG membership list.

# Article 32:   TSG and WG meeting agenda

The draft agenda for a TSG or WG meeting shall be disseminated by the responsible Chair to all on the TSG or WG membership list at least 21 days before a meeting. The draft agenda should indicate subject matters where voting may be required. The draft agenda shall indicate elections to be held (including known candidates).

# Article 33:   TSG and WG meeting registration

Every delegate shall register on arrival at each TSG or WG meeting. Each delegate who represents a Member shall declare the precise name of that Member. A delegate may only register to represent one Member.

# Article 34:   Sub-Working Groups

A Working Group may establish a Sub-Working Group (SWG) with defined Terms of Reference. The Working Group shall appoint a SWG Chair. The SWG shall work by consensus. The meeting notice requirements for a SWG meeting are the same as for TSGs and WGs.

# Section E: Work Programme and Technical Coordination

# Article 35: Work Programme

The MulteFire Alliance Work Programme shall consist of Work Items defined by the TSGs and approved by the Executive Committee.

# Article 36: Work Items

A MulteFire Alliance Work Item is a specification task defined in terms of the following principal parameters:

- title;

- intended output (i.e. Technical Specifications or Technical Reports);

- impact on other Technical Specifications and Technical Reports;

- technical scope, including the field of application of the intended output;

- impact on other MulteFire Alliance Work Items;

- the schedule of tasks to be performed;

- the identities of the supporting Individual Members;

- the identity of the Work Item Rapporteurs.

# Article 37: Work Item Creation

Each proposed new Work Item shall be supported by at least four Sponsor or Full Members, and their names shall be recorded in the Work Item definition prepared for the TSG approval. One or more persons shall be named as Rapporteur for the proposed Work Item, and the Rapporteur shall act as the prime contact point on technical matters and for information on progress throughout the drafting phases. The supporting Members are expected to contribute to and progress the new work item throughout the drafting phases.

In addition to the above, Executive Committee shall review and approve new Work Items, conditioned on receiving all essential parameters. The proposal shall be entered into the MulteFire Alliance work programme, clearly marked as a new entry, for which a unique reference identity shall be allocated. TSGs and WGs shall not commence work on the Work Item deliverables absent Executive Committee approval of the Work Item.

# Article 38: Work Item Adoption by Executive Committee

The MulteFire Alliance work programme shall be made available to all Members. A new Work Item shall remain flagged as "new" until the end of the month following the month during which the MulteFire Alliance work item was entered into the MulteFire Alliance work programme. A new Work Item shall be adopted by the Executive Committee unless a substantial objection is received from Member(s). At the end of the period, the "new" flag shall be removed (even if there is an objection) and it is the responsibility of any objecting Member to discuss their objections with the TSG Chair. If it is not possible to resolve the objection, it is the responsibility of the Member to raise the issue with the Executive Committee.

The TSGs shall ensure that the MulteFire Alliance Work Item details are maintained at regular intervals.

# Article 39:   Work Item Stopping

Prior to completion of the intended MulteFire Alliance output, the responsible TSG may conclude that a Work Item is no longer required. Any Work Item shall automatically be considered by a TSG for stopping, if no progress has been achieved in a given period of time, typically six months, e.g. due to a lack of contribution. In such cases, the Work Item shall be flagged as "stopped" in the Work Programme. The proposal to stop a Work Item shall be fully justified.

The Work Programme shall be updated accordingly, and shall show the Work Item as "stopped" until the end of the month following the month during which the Work Item was initially flagged.

The Work Item will be stopped by the Executive Committee unless substantial objection is received from a Member during this period. It is the responsibility of any objecting Member to discuss their objections with the TSG Chair. If it is not possible to resolve the objection, it is the responsibility of the Member to raise the issue with the Executive Committee.

# Section F:   IPR Policy & Declaration Requirements

# Article 40:   IPR policy guidance

The MulteFire Alliance IPR policy is modelled after the ETSI IPR Policy:

- Baseline text is the ETSI IPR Policy

- Modifications reflect differences industry organization details

- FRAND type IPR Policy

Members have at least 45 days' review period of the candidate technical specification. (IPR Policy, s.5.1)

Any member aware of any of its IPR that would become essential if the candidate technical specification were adopted should submit a MulteFire Alliance IPR Licensing Declaration form for such essential IPR in writing to the MulteFire Alliance Secretariat.  (IPR Policy, s.5.1)

Each Member needs to use its reasonable endeavours during the development of a technical specification to inform MulteFire Alliance of essential IPRs in a timely fashion. (IPR Policy, s.4.1)

The obligations listed above do not oblige members to conduct IPR searches. (IPR Policy, s.4.2)

Background information, related chapters in IPR policy:

- Section 4 Disclosure of IPRs: 4.1, 4.2, 4.3

- Section 5 Notice and Review Period: 5.1

- Section 6 Availability of Licenses: 6.1, 6.2, 6.3, 6bis

- Section 8 Non-availability of Licenses: 8.1, 8.1.1, 8.1.2, 8.1.3, 8.2

# Article 41:   IPR Licensing Declaration Scope and Heads-up Period

Scope of the IPR licensing declaration:

- MulteFire technical specification re-writes the ETSI text, so that it becomes a new set of specifications with changes to the original text not immediately visible.

- The IPR declarations should cover the whole specification i.e. all aspects of the redlined specifications generated by the MFA

Heads-up period

- To enable members to prepare for the declaration period, MulteFire Secretariat will inform the members approximately two (2) weeks before of the beginning of the 45 days' review period.

# Article 42:   How to do the review, by when and by whom

- TSG Chair informs the Executive Committee by email (mfa-executivecomm@multefire.org) at least 2 weeks before when the technical specification is expected to reach stability (i.e. only

minor bugs still needs to be fixed, no new functionality will be added, nothing substantial to be added after stability).

- The President will send a heads-up notification to all members by email approximately 2 weeks before the 45 days' review and declaration period will be initiated by the Executive Committee.

- The President will inform the Board about the start of the review period by email to mfa-board@multefire.org

- The President will email to all members; and post the notification to the MFA ARO community under the Specifications –tab; about the start of the 45 days review period. The technical specification candidate will be uploaded to MFA ARO member community.

- Members should use the templates included in the IPR policy for IPR licensing declaration (ref slide #8). The declarations should be uploaded directly under the Specifications –tab in MFA ARO community or sent by email to iprdeclarations@multefire.org

- Executive Committee will inform by email to mfa-board@multefire.org the Board about the IPR licensing declarations and request the Board to decide on the approval of the specification after the 45 days notification period

- MFA Board decides on the approval of the Technical Specification

- The Board will decide when approving the specification also if the technical specification can be made available publicly i.e. for non-members; and when to make such public availability

- The President will inform the members about the Board decision by email

- The approved Technical Specification is available for implementation in the MFA ARO community to all members immediately after the approval

- If the Board has approved non-members to get access to the Technical Specification, it will be available at the MFA publicly accessed website

- MWG will decide when to announce Technical Specification release, highlighting key features, regardless if the release was made available publicly or not.

# Article 43:   Members' IPR Licensing Declarations

Members shall use one of the MulteFire Alliance IPR Licensing Declaration forms at the Appendix to the IPR Policy (also enclosed) to make their IPR licensing declarations:

1. "Blanket" declaration

2. Declaration regarding specific listed patents

3. Refusal to grant licenses

When an essential IPR relating to a particular technical specification is brought to the attention of MulteFire Alliance, the President of MulteFire Alliance shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR [IPR Policy, s.6.1]

In case of non-availability of licenses prior to the publication of a technical specification, section 8 of the IPR Policy applies

# Article 44:   Board of Directors Vote

Approval of the candidate Technical Specification by a formal vote of the Board of Directors

a Technical Specification is adopted on Directors' majority vote (i.e., majority of the Directors present at a duly held meeting at which a quorum is present) (by-laws, s.4.14)

# Section G:   Deliverables

# Article 45:   Deliverable Types

MulteFire Alliance shall prepare, approve and maintain documents known as Technical Specifications and Technical Reports. Such documents shall be drafted by the TSGs (or WGs) and shall be subject to and the Board.

Technical Specification shall include, but not be limited to technical requirements documents, interface specifications, conformance test specifications, and interoperability test specifications.

# Article 46:   Approval Process

Approval of Technical Specifications and Technical reports by TSG shall normally be by consensus.

Where consensus cannot be achieved in the TSG a vote to approve may be taken.

When Technical Specifications and Technical Reports become sufficiently stable, they shall be put under change control of the relevant TSG WG. The further elaboration of these Technical Specifications and Technical Reports shall be achieved by change requests to be approved by the TSG.

TSG approval shall be followed by the Board approval.

# Article 47:   Copyright and Ownership

The MulteFire Alliance will have ownership (including copyright) of the Technical Specifications and Technical Reports produced by MulteFire Alliance.

# Article 48:   Naming of technical specifications or technical reports

Specification Numbering

There are two types of MulteFire Alliance specifications:

1.  Specifications fully created by MulteFire Alliance.

2.  Specifications based on specifications originally published by 3GPP, but contain changes provided by MFA that are MulteFire specific. The cover page of these specifications is identical to the title page of the 3GPP specification (i.e., the baseline). Any changes or modifications that MFA provides over the 3GPP baseline are indicated with track changes. The modifications indicated with track changes in the MFA specifications also include the modifications due to approved 3GPP CRs that are not part of the baseline 3GPP specification (E.g. if the baseline 3GPP version is 13.5 and there is a 3GPP CR implemented only in version 13.6 and MFA would like to apply that CR for MF then it should be indicated with track changes as it is change over the baseline 3GPP version.). Note that these 3GPP CRs shall also go via the normal MFA change approval process (see Annex A), they are not introduced automatically. In order to distinguish the modifications coming from 3GPP CRs form other modifications, different author is used for this type of modifications when the specification with track changes is created. Therefore, a MFA specification may contain modifications from two authors: one author for modifications introduced due to approved 3GPP CRs and one author for other MFA modifications.

MFA documentation uses a standard documentation ID system. Each document ID begins with the three-letter designation MFA. This is followed by a two-letter abbreviation to indicate whether the document is a technical specification (TS) or technical report (TR).
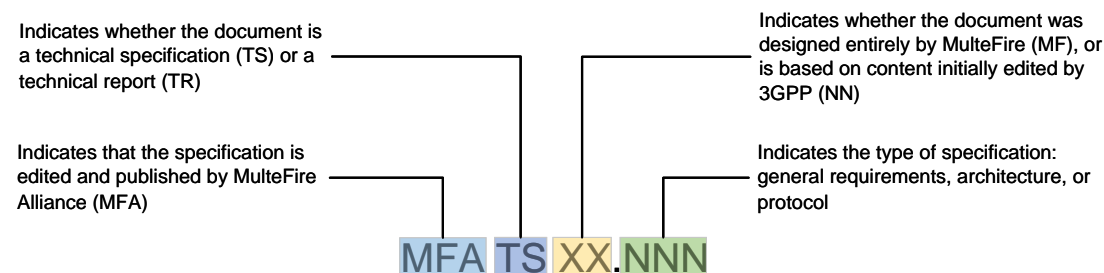
The final segment of the ID contains a two-character abbreviation followed by a three-digit number to indicate the type of specification/report. The first digit of the three-digit specification number of the MulteFire specification refers to the type of the specification.

- 1XY: General MulteFire documents and documentation of requirements.

- 2XY: Architecture (Stage 2) level specifications.

- 3XY: Protocol (Stage 3) level specifications.

The standalone MulteFire Alliance specifications (specifications fully created by MulteFire Alliance) include a two-letter "MF" prefix, that precedes the 3-digit number at the end of the document ID (e.g., this specification uses the following number: "MF.100", and is referred in other specifications as "MFA TR MF.100").

MulteFire Alliance specifications based on a 3GPP specification retain the numbers used in the baseline 3GPP specification (e.g., MFA TS 12.345).

Document identification system for MulteFire alliance:

Indicates whether the document is a technical specification (TS) or a technical report (TR)

Indicates whether the document was designed entirely by MulteFire (MF), or is based on content initially edited by 3GPP (NN)

Indicates that the specification is edited and published by MulteFire Alliance (MFA)

Indicates the type of specification: general requirements, architecture, or protocol

MFA TS XX.NNN

Example of a document ID for content created entirely by MFA, per §4.1 and §4.1.1.

MFA TR MF.100

Example of a document ID for content modified by MFA, based on a 3GPP source specification, per §4.1 and §4.1.2.

MFA TS 36.300

# Section H:   Reporting

# Article 49:   Chair's reporting obligations

A report shall be prepared by the Chair following all Board and TSG meetings.

# Article 50:   Changes to structure and officials

The Chair of each TSG shall inform the Board of all organizational changes concerning Working Groups and their officials. An up to date record of the MulteFire Alliance structure shall be maintained.

# Article 51:   Calendar of meetings

The Executive Committee shall maintain an up to date calendar of the dates and venues for future meetings. This calendar shall be posted on ARO.

# Article 52:   Relations with other groups

TSG and WGs are encouraged to propose liaisons to the Executive Committee for consideration for Board approval as necessary to support the work.

A liaison statement shall clearly communicate what is expected from the receiver, i.e., which parts are for information, which questions are expected to be clarified and by whom (especially if there are multiple receivers), and when an answer is needed, e.g., when is the next meeting of the group sending the liaison statement.

Following Board approval of the liaison relationship and Executive Committee liaison agreement execution, a TSG or any subtending Working Group may send individual liaisons, without Board approval, but by checking with the Executive Committee. Except if the statement is considered sensitive by the TSG Chair, in which case additional Executive Committee and / or Board clearance is needed.

It is not necessary to have all external liaisons copied to the Board, but need to keep the Executive Committee copied to make sure the spirit of the liaison agreement is in force. The liaison originating TSG should decide, at its own discretion, which should be copied. External liaisons that may have management implications such as schedules, organization, process, procedures, and policy shall be copied to the Executive Committee for review and if needed for Board approval (in case of sensitivities)

Any MFA member wishing to attend a 3rd party meeting under the terms of the liaison agreement need to send the request to the Executive Committee for review and approval. This process is needed to ensure that the specific liaison agreement rules are followed.

The secretariat shall collect 3rd party liaison participants attending MFA meetings attendance fees (in any). These fees can be waived by the Executive Committee.

# Section I:   Miscellaneous

# Article 53:   Support Team

Members on a volunteer basis as well as contracted secretariat support shall provide logistical support to, and assist in the operation of, MulteFire Alliance and operate under the overall management of the Board of Directors and as otherwise delegated to MulteFire Alliance President and TSG.

# Article 54:   Working language

The working language for MulteFire Alliance shall be English.

Any Meetings of MulteFire Alliance shall be conducted in English.

MulteFire Alliance Technical Specifications and Technical Reports shall be prepared in English (as defined by the Shorter Oxford English Dictionary).

# Article 55:   Duration

MulteFire Alliance shall be task oriented and on completion of the tasks the future of MulteFire Alliance shall be re-considered. The continuation of MulteFire Alliance shall therefore be confirmed by the Board of Directors on an annual basis.

# Article 56:   Review of activities

An evaluation of the activities of MulteFire Alliance should be made by the Board of Directors at regular intervals.

# Article 57:   Dissolution, winding up

In the event of a voluntary dissolution of MulteFire Alliance, the Members shall determine the terms of liquidation by consensus. All issues shall be documented and distributed at least 30 days prior to decisions being made.

# Article 57A:  Exhaustion of appeal procedures

Regarding any claim or dispute of a Member arising from or relating to any activity of any MulteFire Alliance meeting or action, including relating to a TSG or WG meeting, such Member shall, prior to commencing any such legal proceeding against MulteFire Alliance, its leadership, support staff, et al., in a court, an arbitral panel or other adjudicatory body, exhaust all appeal procedures provided in the MulteFire Alliance Working Procedures. Exhaustion of appeal procedures shall be diligently expedited by both the appealing party and the appeal body.

# Article 58:   Amendments to MulteFire Alliance Working Procedures

These Working Procedures may only be amended by recommendation made by the Executive Committee to the Board of Directors for adoption.

# Annex A:    Definitions

| Term | Definition |
|------|------------|
| Consensus | General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interest and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. (Note: consensus need not imply unanimity). |
| Delegate | An individual taking part in a TSG/WG meeting physically or by electronic means. |
| Election | The voting process used to identify an individual from a number of individuals. |
| Leadership | A Chair, Vice-Chair, or Convenor of an TSG/WG, or any other MulteFire Alliance meeting. |
| Member | A representative of a voting member (Sponsor or Full Member (including affiliates)) having participation rights and which has registered to take part in MulteFire Alliance. |
| Participant | A representative of a non-voting member (Adopter, Test Lab or Authorized Test Lab including affiliates) having participation rights and which has registered to take part in MulteFire Alliance. |
| Represent | Attend on behalf of.<br>A person who attends a meeting on behalf of a Member or Participant represents that Member or Participant. The person is not necessarily employed by that Member, but may be, for example, employed by a subsidiary company in the same group as the represented Member; or the person may be an independent consultant under contract to the Member. "Representation" sometimes influences the eligibility to vote – see article 35 and annexes A and F. |
| Sub Working Group | A subordinate body of a Working Group. |
| Technical Report | A MulteFire Alliance output document containing mainly informative elements approved by a Technical Specification Group. |
| Technical Specification | A MulteFire Alliance output document containing normative provisions approved by a Technical Specification Group. |
| Voting Member | An Individual Member who has voting rights within a TSG/WG. |
| Work Item | The documented record of a specific technical activity of MulteFire Alliance. |

| Term | Definition |
|---|---|
| Work Programme | The documented record of the all technical activities of MulteFire Alliance. |
| Working Group | A subordinate body of a Technical Specification Group. |

# Annex B:    Abbreviations

| Abbreviation | Definition |
| --- | --- |
| CWG | Certification Working Group |
| MWG | Marketing Working Group |
| SWG | Sub-Working Group |
| TSG | Technical Specification Group |
| WG | Working Group |

# Annex C:    Guidance on meeting organization

## C.1                 Meeting classification

TSG and WG Meetings are classified either:

- ordinary; or

- ad hoc.

## C.2                 Ordinary meetings

Ordinary meetings are ones where the regular business of the TSG or WG is conducted.  Such meetings are normally chaired by the Group's chair or, if unavailable, a vice-chair.  Ordinary meeting should be announced at least six months prior to the opening day of the meeting.

TSG and WG ordinary meetings shall follow an incrementing number sequence.  If an additional ordinary meeting is required between two ordinary meetings, the sequence may be preserved, even though this means renumbering subsequent meetings, or the additional meeting may be numbered using the 'bis' suffix as a numbering scheme.

Attendance at an ordinary meeting counts towards a Member's eligibility to cast a vote in the Group (see articles 26 and 27).  The MulteFire Alliance shall record the participation in an ordinary meeting (each person and organization represented) and the attendance list shall be included in the meeting report.

## C.3                 Ad hoc meetings

An ad hoc meeting of a WG or a TSG is one called to address one or more particular topics.  The ad hoc meeting shall be called by decision of the WG (or its parent TSG) or TSG concerned; the decision to hold any subsequent ad hoc meetings on the same topic may be made by the ad hoc meeting participants themselves without reference to the parent WG or TSG, although the parent WG or TSG shall review any ad hoc activity at every Ordinary meeting and determine to either continue or to close the ad hoc activity, even if the previous ad hoc meeting suggested a further meeting.  The scope of each subsequent ad hoc meeting shall be indicated by the chair at least 21 days before the meeting. The ad hoc meeting shall not expand or change the scope originally determined by the parent group. An ad hoc meeting is allowed to make decisions only within its pre-defined remit, and any such decisions shall be ratified by the parent WG or TSG unless, in the case of a WG, a decision was previously explicitly delegated by the WG to the ad hoc meeting.

An ad hoc meeting may be chaired as described for an ordinary meeting above, or, with the agreement of the WG or TSG concerned, by a Work Item rapporteur, or other appropriate person.  Although open to all MulteFire Alliance Individual Members, ad hoc meetings may attract only a subset of Member representatives who would normally participate in ordinary meetings.

Ad hoc meetings shall not be considered when calculating voting rights.  That is, attendance at (or absence from) an ad hoc meeting shall not influence voting rights, which are determined solely by attendance at "ordinary" meetings.

No voting shall occur at ad hoc meetings.

## C.4                 Attendance register

### C.4.1               Face to face meetings

A delegate is deemed to have attended a given meeting if the individual confirms his or her participation by signing the attendance list made available by the group's secretary during the meeting.  If a delegate does not sign the attendance sheet during the meeting, the secretary shall assume that the individual did not attend.

A delegate, having registered and begun to participate in a meeting, is not allowed to change the organization he represents during the course of that meeting. An individual delegate is not allowed to simultaneously represent two or more Individual Members at a meeting.

## C.4.2          Electronic meetings

Electronic meetings such as audio / video conferences, email exchanges considered as meetings, etc., are encouraged where appropriate.  For such events, the Secretary will establish the attendance list on the basis of those actually participating in the meeting (those dialling in to the conference bridge, those issuing and responding to emails, etc.)  Nevertheless, advance registration is strongly encouraged.

Fully electronic meetings are to be considered as "ad hoc" as defined above.

Participation by a Member in fully electronic meetings, or electronic participation in a face to face meeting (e.g. by phoning in) is not considered for the accrual or loss of voting rights.

# Annex D:    Working agreements

"Working agreements" are tentative decisions reached by MulteFire Alliance groups in order to make progress on matters where consensus (as defined in annex A) cannot be reached.  It is intended to be used in situations where there is a clear majority in favour of one approach, but a small minority has sustained opposition to that approach.

The working agreement process has the following steps:

- Consensus cannot be reached on an issue.  A substantial majority of individual members prefer a given approach, but there is sustained opposition by a small minority of individual members, preventing consensus.

- The chair declares a working agreement.  The working agreement is documented in the meeting report

- The approach agreed to by the majority and documented in the working agreement can continue unimpeded.

- The working agreement is entered into the MulteFire Alliance working agreements page on the MulteFire Alliance web site.  The window for challenging the working agreement is now open.

- Working agreements may be challenged, resulting in a formal vote.  This potential vote would be held at the next meeting of the WG or parent TSG (whichever comes first).  If the next meeting is less than 14 days after the establishment of the working agreement, then that meeting is skipped in determining the next meeting.  The meeting for potential voting is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site www.multefire.org

- The challenge cut-off date is established. This is 7 days before the start of the meeting for potential voting.  The cut-off date is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site.

- Members wishing to challenge the working agreement may do so until the challenge window closes.  A challenge may be made by informing the chair of the group which will do the voting. Any received challenge is documented on MulteFire Alliance working agreements page of the MulteFire Alliance web site.

- The group which will be voting is informed of the intention to have a working agreement challenge vote and the specific voting question.

- If no challenge is received by the challenge cut-off date, then the working agreement is confirmed.  The confirmation of the working agreement is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site.  The issue is closed.

- If a challenge is received, then a formal vote on the working agreement will occur at the designated meeting.  Voting on working agreements is a standing part of meeting agendas. Voting is as described in articles 25 & 26 of the working procedures.

- If the challenge fails (at least 71% in favour of the working agreement), then the working agreement is confirmed.  The confirmation of the working agreement is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site.  The issue is closed.

- If the challenge succeeds (less than 71% in favour of the working agreement), there are the 2 following cases:

- If less than 71% but more than 66% are in favour of the working agreement, then this is escalated to the MFA board through the MFA President.

- If less than 66% in favour of the working agreement, then the working agreement fails. All changes which were made based on the working agreement shall be reversed and the group must continue to search for consensus. The overturning of the working agreement is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site.

- Members may withdraw a challenge at any time in the process. If the last challenge is withdrawn after the challenge cut-off, then the working agreement is confirmed. The confirmation of the working agreement is documented on the MulteFire Alliance working agreements page of the MulteFire Alliance web site. The issue is closed.

# Annex E:    Change history

| Date | Rel. | Subject/Comment |
|------|------|-----------------|
| 2015-10-1 | 1 | Founding Working Procedures document adapted from 3GPP Working Procedures document. |
| 2018-2-1 | 2 | Updated version incorporating updated Bylaws, Board, Executive Committee, and TSG / Chairs feedback. |