

To: ETSI MEMBERS AND COUNSELLORS

Subject: Participating to ISGs without having to sign an ISG Member Agreement

Dear Madam,
Dear Sir,

Further to the decision taken during the Specially Convened Meeting (SCM) of the ETSI General Assembly (GA#80 / 29-30 Nov. 2022), to allow any ETSI Full or Associate member to participate in the activities of an ETSI Industry Specification Group (ISG) without having to sign an ISG Member Agreement, I am very pleased to invite you to go through the following interim process should your organization or your Corporate Group wishes to immediately join an ISGⁱ:

The Official Contact of the ETSI member organization or Corporate Group wishing to join one or several ISGs, shall send an email to isg_agreements@etsi.org with

- i. **First name, last name of the Official Contact** as recorded in the ETSI database;
- ii. **Acronym of the ISG** of interest,
- iii. **Legal name(s) of the organization(s)** to be added as member(s) of the ISG of interest.

Note: In case of interest for several ISGs, please repeat steps ii. and iii. in the same email.

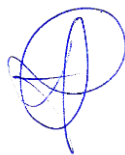
Upon reception of the request, the ETSI Secretariat will add the listed organization(s) to the relevant ISG membership and will notify both the Official Contact and the Technical Officer supporting the relevant ISG(s).

Once the above steps have been completed, any delegate of the said organization(s), already owning a personal EOL account, will be immediately entitled to subscribe to the relevant ISG email exploder list and/or to register to any upcoming meeting of the ISG.

Those delegates who do not own a personal EOL account yet, will be immediately entitled to request one via the [SIGN UP](#) feature available from the [ETSI Portal](#).

NOTE: the above interim process, which currently aims at immediately replacing the administrative burden of signing a Member Agreement to join an ISG, will disappear as soon as the ETSI Portal and the related applications will be adapted by the ETSI IT Department to make the participation of ETSI Full and Associate members to ISGs as transparent and easy as for Technical Bodies.

Yours faithfully,



Luis Jorge Romero Saro
ETSI Director-General

ⁱ No need to go through steps i to iii for the ISG(s) you are already member of.

ETSI Industry Specification Group relating to Experiential Networked Intelligence (ISG ENI)

between

The European Telecommunications Standards Institute (hereinafter referred to as "ETSI"), a French non-profit making association organized under the law of July 1, 1901, located at 650 Route des Lucioles, 06560 Valbonne Sophia Antipolis, France, represented by its Director-General, (hereinafter referred to as the "Director-General")

and

The ISG Member specifically identified in **Annex 1** hereof (hereinafter referred to as the "Signatory").

Whereas:

- A. ETSI is a standard-setting organization in the field of telecommunications, officially recognized by the European Union as a European Standards Organisation;
- B. The Signatory is, either (i) an ETSI Full or Associate member wishing to participate in the work of the ISG identified in **Annex 2** hereof (hereinafter, the "ISG"), or (ii) has applied for ETSI Full or Associate membership and has been authorized by the Director-General to participate in the work of the ISG;
- C. The Director-General has approved the creation of the ISG and its Terms of Reference as attached in **Annex 4** hereafter;
- D. The Signatory wishes to participate in the work of the ISG as an ISG Member (as this term is defined below) in accordance with Clause 3.4 of the ETSI Technical Working Procedures and has agreed to enter into and be bound by the terms of the present Agreement.

It is agreed as follows:

1. Incorporation by reference and definitions

1.1. Incorporation by reference

Subject to Discretionary Decisions, the decision making processes set forth in **Article 8** of the present Agreement and any authorized deviations from the ETSI Technical Working Procedures provided under **Article 9** of the present Agreement, the parties hereby agree to be bound by and comply with the terms and rules relating to the creation, organization, operation and termination applicable to Industry Specification Groups set forth in the [ETSI Directives](#), including the ETSI Guidelines for Antitrust Compliance which shall be incorporated by reference and form an integral part hereof.

1.2. Definitions

In the present Agreement, all capitalized terms and expressions not otherwise defined herein shall have the meaning ascribed to them in the [ETSI Directives](#), and, unless otherwise required by the context:

- (a) "Director-General" shall have the meaning ascribed to it in the presentation of the parties;
- (b) "Discretionary Decisions" shall have the meaning ascribed to it in **Article 8.1** of the present Agreement;
- (c) "ETSI Directives" shall mean the set of documents ruling ETSI available at <http://portal.etsi.org/directives/home.asp> and applicable on the date set forth in **Annex 2** hereof as well as their subsequent versions and evolutions adopted during the lifetime of the ISG;
- (d) "ETSI IPR Policy" shall have the meaning ascribed to it in **Article 2** of the present Agreement;
- (e) "ETSI Technical Working Procedures" shall mean the document in the [ETSI Directives](#) which apply to the present Agreement;

- (f) "ISG Member" shall mean, when used in relation to the ISG, either an ETSI Full or Associate member or an applicant to ETSI Full or Associate membership which has been authorized by the Director-General to participate in the work of the ISG and which has signed the ISG Member Agreement;
- (g) "ISG Participant" shall mean, when in relation to the ISG, either an ETSI Observer or a legal entity which, even though it is not an ETSI Full or Associate member or an applicant to ETSI Full or Associate membership, has been authorized by the Director-General to participate in the work of the ISG and which has signed the ISG Participant Agreement;
- (h) "Terms of Reference" shall mean those Terms of Reference approved by the Director-General on the date set forth in **Annex 2** hereof as well as their subsequent versions and evolutions adopted during the lifetime of the ISG, setting out, inter alia, the scope of the ISG, the planned deliverables and delivery dates, and the planned collaboration with other bodies;
- (i) "Attendee" shall mean an individual
- participating physically or remotely in an ISG meeting; or
 - participating in an electronic ISG meeting; or
 - participating in the work of the ISG by using (non-real-time) electronic working methods;
- (j) "Counsellor" shall mean the representatives of the European Commission (EC) as well as representatives of the Secretariat of the European Free Trade Association (EFTA). ETSI Counsellors may attend ISG meetings without signing any ISG Agreements or paying meeting fees;
- (k) "Observer" shall mean a legal person fulfilling the conditions for ETSI Full member or Associate member status but choosing not to have the right to participate fully in the proceedings of the Institute;
- (l) "Group Specification" (GS) shall mean an ETSI deliverable, containing normative provisions, approved for publication by an ISG;
- (m) "Group Report" (GR) shall mean an ETSI deliverable, containing only informative elements, approved for publication by an ISG;
- (n) "Business Day" shall be considered as every French official working day of the week.

2. Intellectual Property

The Signatory agrees to the terms of, and shall abide by, the ETSI IPR Policy set forth in Annex 6 of the [ETSI Rules of Procedure](#) and their subsequent versions and evolutions (hereinafter, the "ETSI IPR Policy").

3. ISG membership: duties and rights

The ISG membership comprises ISG Members and ISG Participants.

ISG Members and ISG Participants have the duty to constructively cooperate in compliance with all applicable competition law rules on the development of ISG Group Reports and/or ISG Group Specifications within the scope of the ISG as described in its Terms of Reference.

The ISG Chair is responsible for both external communication and internal reporting obligation to ETSI.

Any communication outside the ISG itself by the ISG Chair and/or by the ISG Members and ISG Participants shall be made in coordination with the Director-General.

It is accepted that an ISG can have its own valuable opinion which can differ from ETSI's opinion. Therefore in case of external communication, the ISG Chair shall ensure that such communication is clearly made by the ISG and marked as such for avoiding any confusion of representation with ETSI.

In the case of a public consultation, the ISG Chair shall beforehand coordinate with the Director-General. When a response to such public consultation is envisaged, if the response is addressing technical matters the ISG Chair shall ensure that such response is clearly specified as coming from the ISG and differentiated from ETSI's answer.

If the response is addressing non-technical matters, such response shall be reviewed by the Director-General.

ISG Members have the right to cast their vote on the approval of an ISG Group Report or Group Specification when necessary, and in other instances when decisions by the ISG Members are required.

ISG Members have the right to appeal directly to the Director-General to challenge an ISG Chair's decision and shall inform the ISG Chair beforehand.

4. ISG Meeting Fees

For information of the ISG Members, ISG Participants are required to pay a meeting fee for attending ISG meetings as described in **Annex 5** of the ISG Participant Agreement.

This meeting fee may be modified by a decision of the Director-General.

5. ETSI Secretariat resources

Basic administrative support will be provided by the ETSI Secretariat at no additional cost to the ISG Members and ISG Participants e.g.:

- info/meeting/document handling area on the ETSI Portal;
- document storage area on the ETSI Docbox server;
- e-mail lists provision;
- entry of the Work Items into the ETSI Work Program Management (WPM) database;
- processing/publication of ISG Group Reports and/or Group Specifications, provided they have respected the ETSI Drafting Rules;
- a support officer will be allocated to provide guidance and assistance to the ISG;
- support for meetings will be provided when the meeting is held at the ETSI Headquarters, e.g.
 - meeting rooms in ETSI premises;
 - meeting support for invitations, badges, etc in ETSI premises;
 - refreshments in ETSI premises.

ISG meetings held outside of the ETSI Headquarters shall be supported by the hosting organization.

In addition the ETSI Secretariat may support the ISG in organizing workshops and possible interoperability events.

5.1. Additional administrative support

The ISG Chair may request that the ISG receives additional administrative support from the ETSI Secretariat, provided that the Director-General agrees and

- either the ISG Members and ISG Participants agree to provide voluntary contributions to cover the costs of such additional support and the ETSI Secretariat shall only provide the requested additional administrative support after receipt by ETSI of all payments corresponding to such contributions,
- or resources corresponding to such additional support are approved by the ETSI Board upon petition by the ISG Chair.

5.2. Resources requirements

No resource requirements, beyond the "Basic Administrative Support" provided by the ETSI Secretariat to ISGs have been identified.

Further resource requirements may be identified from time to time by the ISG Members, who will decide on the funding arrangements as required.

6. Convening an ISG meeting

6.1. Invitation to an ISG meeting

The Director-General will announce the first physical meeting (“Kick-off Meeting”) of the ISG in a Collective Letter, providing at least thirty (30) days’ notice.

The invitation to an ISG physical meeting and the necessary logistical information shall be disseminated by the hosting organization at least thirty (30) days before the meeting to all on the ISG membership list.

6.2. Agenda for an ISG meeting

The Director-General will announce the draft agenda for first physical meeting (“Kick-off Meeting”) of the ISG in a Collective Letter, providing at least thirty (30) days’ notice.

The draft agenda shall be disseminated by the ISG Chair to all on the ISG membership list at least thirty (30) days before a physical meeting.

The draft agenda shall include details of draft ISG Group Reports and/or Group Specifications for approval and ISG Chair/Vice-Chairs and/or Working Group Chairs for appointment.

Any other subject matters where voting may be required shall also be included and indicated in the draft agenda.

ISG Group Reports and Group Specifications will only be approved within ISG physical meetings, or over a period which may extend beyond the end of the ISG physical meeting whereby the ISG Members use electronic voting.

6.3. Documentation for an ISG meeting

Contributions for an ISG meeting shall be uploaded a minimum of seventy-two (72) hours prior to a meeting.

Late contributions shall be deferred to the next meeting unless there is a Consensus to make an exception.

Meeting documents shall follow a consistent numbering system as shown in the following example:

ETSI/ISG(nn)x_filename

This numbering system has the following logical elements:

ETSI:	to indicate that it is an ETSI document;
ISG:	the name of the ISG or related Working Group;
(nn):	to indicate the year, e.g. (16);
x:	to indicate a unique n° of the document, appended with a revision n° if applicable;
filename:	filename of the document.

6.4. Registration for an ISG meeting

Every Attendee shall register prior to a physical or electronic ISG meeting using the Meeting Application on the ETSI Portal or on arrival at the meeting.

Where registration is made on arrival at the meeting each Attendee representing an ISG Member or an ISG Participant shall declare the precise name of that ISG Member or ISG Participant organization.

An Attendee may only represent one (1) ISG Member or one (1) ISG Participant.

6.5. Maintaining an ISG membership list

The ISG shall maintain an ISG membership list within an email exploder list established specifically for that purpose.

Any individual may join this email exploder list if he/she is a representative of a legal entity that has signed the ISG Member Agreement or the ISG Participant Agreement and has an ETSI-On-Line (EOL) user account, and those who join this email exploder list will be considered as being on the ISG membership list.

Failure to reconfirm the intention to remain on the email exploder list at regular intervals (lists are normally reviewed every six (6) months) will result in removal from this email exploder list and thus from the ISG membership list.

The ISG membership list shall be used for the dissemination of information, for building of Consensus, and for formal decision making within the ISG.

7. Preparation of ISG Group Reports (GR) and Group Specifications (GS)

ISG Group Reports and Group Specifications are prepared within the ISG or within specific ISG Working Groups. The ISG Working Groups are chaired by ISG Working Group Chairs, who are appointed according to the rules of operation of the ISG.

All draft ISG Group Reports and ISG Group Specifications should be approved by Consensus by the ISG Members and ISG Participants according to the rules of operation of the ISG. In case Consensus cannot be achieved then **Article 1.1** of **Annex 3** applies.

If an ISG Group Report or Group Specification is prepared in an ISG Working Group and fails to be approved by the ISG Members and ISG Participants, it shall be referred back to the ISG Working Group.

8. Decision Making

The Signatory undertakes to comply with all applicable laws and regulations, including EC and national competition laws and regulations, and to refrain from implementing any discriminatory decision making process in the context of the ISG.

8.1. Discretionary Decisions

The ISG shall be operated pursuant to the rules set forth in the ETSI Technical Working Procedures, provided however that the ISG Members and ISG Participants may take decisions on issues concerning its organizational structure, the possible revision of the ISG Terms of Reference of its Working Groups, the approval of draft ISG Group Reports and Group Specifications and more generally, any matter which is left at their discretion under the [ETSI Directives](#) (hereafter, the "Discretionary Decisions"). Such decisions will be binding upon the ISG Members and ISG Participants.

8.2. General decision making process

In accordance with Clause 3.7 of the ETSI Technical Working Procedures, and subject to the provisions of **Article 1.1** of the present Agreement, the Signatory agrees that the Discretionary Decisions taken by the ISG Members and ISG Participants shall be binding upon the Signatory when taken according to the rules laid down in Clause 1.7 of the ETSI Technical Working Procedures, except for any variations provided for in **Annex 3** hereof.

9. Authorized deviations from the ETSI Technical Working Procedures

The ISG shall operate pursuant to the rules set forth in the ETSI Technical Working Procedures, with the exceptions provided in **Annex 3** hereof.

10. No assignment

Except written agreement by the Director-General, the rights and obligations of the Signatory under the present Agreement are personal to the Signatory and shall not be assigned (whether absolutely or by way of security and whether in whole or in part), sub-contracted, delegated, transferred, pledged, declared in trust for a third party, or otherwise disposed of in any manner whatsoever (each of the above an "assignment") and any such purported assignment in contravention of this Article shall be ineffective.

11. Limitation of liability

ETSI, its officers, employees and agents shall have no liability to the Signatory in respect of any actual or expected loss of profits, loss of revenue, loss of goodwill, loss of opportunity, loss of business, or increased costs or expenses.

12. Term and termination

12.1. Date of termination

The present Agreement shall enter into force as from the date of its execution by the parties and shall remain effective until the earlier of (i) the date of termination of the ISG, (ii) the date of the Signatory's resignation from the ISG, (iii) the date of the Signatory's resignation or expulsion from ETSI, (iv) the date of the Signatory's revocation from the ISG if the Signatory commits a material breach of any of its obligations under the present Agreement (including the [ETSI Directives](#) incorporated by reference pursuant to **Article 1.1** of the present Agreement and the ISG Terms of Reference) and fails to remedy the same within thirty (30) days after receiving notice to do so (hereinafter, the "date of termination").

For the purpose of determining the date of termination:

- (a) the date and conditions of termination of the ISG shall be decided by the Director-General pursuant to Article 8.3.9 of the [ETSI Rules of Procedure](#) and Clause 3.2 of the ETSI Technical Working Procedures;
- (b) the Signatory may resign as ISG Member at any time by sending a resignation notice to the Director-General, copy to the ISG Chair, and the date of the Signatory's resignation from the ISG shall be deemed to be the date of receipt of the resignation notice by the Director-General;
- (c) the date of the Signatory's resignation or expulsion from ETSI shall be determined pursuant to Article 1.4 of the [ETSI Rules of Procedure](#);
- (d) the Director-General may revoke at any time the invitation or authorization to attend meetings of the Signatory in the event the Signatory commits a material breach of its obligations under the present Agreement by sending a revocation notice to the Signatory, copy to the ISG Chair, and the date of revocation of the Signatory from the ISG shall be deemed to be the date of receipt of the revocation notice by the Signatory.

12.2. Effect of termination

Upon occurrence of the date of termination, the present Agreement shall automatically terminate and the Signatory shall cease to participate in the work of the ISG and shall no longer receive any benefit or information as an ISG Member, it being provided however that termination of the present Agreement for any reason:

- (a) shall be without prejudice to any rights or obligations which shall have accrued or become due prior to the date of termination and the Signatory shall remain bound to duly perform and complete any and all obligations which shall have arisen out of or in connection with the present Agreement prior to the date of termination, including any transfer or license of intellectual property rights (or undertakings to transfer or license intellectual property rights) pursuant to the [ETSI IPR Policy](#) and **Article 2** of the present Agreement;
- (b) shall not affect any right or obligation of any party under the [ETSI Directives](#), which shall continue into force after the termination of the present Agreement (except in the event of the Signatory's resignation or expulsion from ETSI, in which case the provisions of Article 1.4 of the [ETSI Rules of Procedure](#) shall apply); and
- (c) shall not prejudice the rights or remedies which any party may have in respect of any breach of the terms of the present Agreement prior to the date of termination.

12.3. Termination of the ISG

In the event of termination of the ISG, the parties agree that the ISG shall, prior to the date of termination of the ISG (as determined pursuant to **Article 12.1(a)** of the present Agreement), submit to the Director-General

recommendations concerning the maintenance of Group Reports(s) and/or Group Specification(s) produced by the ISG.

13. Notice

Unless otherwise specified by the Director-General, a notice (including any approval, consent, request, or other communication) in connection with the present Agreement must be in writing, in the English language, and left at the address of the addressee or sent by pre-paid registered delivery with return receipt requested/express mail (air mail if posted from or to a place outside France) to the address of the addressee or sent by facsimile to the facsimile number of the addressee, and marked for the attention of the person so specified, or to such other address or facsimile number, and/or marked for the attention of such other person as the relevant party may from time to time specify by notice given in accordance with this Article, and, for the avoidance of doubt, must not be sent by e-mail.

The relevant details of the Signatory are set forth in **Annex 1** hereof and the relevant details of ETSI are as follows:

Addressee: ETSI, 650 route des Lucioles, 06921 Sophia Antipolis Cedex, France
Attention: Director-General
Facsimile: +33 (0)4 93 65 47 16

In the absence of evidence of earlier receipt, a notice shall take effect and be deemed received:

- (a) in the case of a notice left at the address of the addressee, upon delivery at that address;
- (b) in the case of a posted letter, the seventh day after posting; and
- (c) in the case of a facsimile, on production of a transmission report from the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the facsimile number of the recipient.

A notice received or deemed to be received on a day which is not a Business Day or after 5pm on any Business Day according to local time in the place of receipt, shall be deemed to be received on the next following Business Day.

14. Severance/unenforceable provisions

If any provision or part of the present Agreement is deemed void or unenforceable due to applicable law, it shall be deemed to be deleted and the remaining provisions of the present Agreement shall continue in full force and effect.

15. Variation and waiver

15.1. Variation

Subject to the [ETSI Directives](#) and the ISG Terms of Reference, this Agreement sets forth the entire agreement of the parties with respect to the subject matter hereof. No variation (including any supplement, deletion or replacement, however effected) of the present Agreement shall be effective unless it is in writing (which for this purpose, does not include e-mail) signed by or on behalf of each of the parties to the present Agreement.

15.2. Waiver

The rights and remedies of the parties shall not be affected by any failure to exercise or delay in exercising any right or remedy or by the giving of any indulgence by any party or by anything whatsoever except a specific waiver or release in writing and any such waiver or release shall not prejudice or affect any other rights or remedies of the parties.

No single or partial exercise of any right or remedy prevents any further or other exercise thereof or the exercise of any other right or remedy.

16. Third party beneficiary (“stipulation pour autrui”)

The Signatory shall have sight of and shall accept the terms and conditions provided for the benefit of the ISG Members in any ISG Participant Agreement entered into between ETSI and an ISG Participant. As a result of

such acceptance, all provisions of such an ISG Participant Agreement provided for the benefit of the ISG Members, acting individually or collectively, shall be binding upon the ISG Members and may be enforced by the Signatory pursuant to Article 1121 of the French Civil Code.

17. Governing law, jurisdiction and service of process

17.1. Governing law

This Agreement shall be governed by and interpreted in accordance with French law.

17.2. Jurisdiction

Each party irrevocably agrees for the benefit of ETSI that the Tribunal de Commerce de Grasse (France) shall have jurisdiction in relation to any claim, dispute or difference concerning the present Agreement and any matter arising therefrom.

The submission to the jurisdiction of the Tribunal de Commerce de Grasse shall not (and shall not be construed so as to) limit the right of ETSI to bring legal proceedings in any other court of competent jurisdiction including without limitation the courts having jurisdiction by reason of the Signatory's domicile.

Legal proceedings by ETSI in any one or more jurisdictions shall not preclude legal proceedings by it in any other jurisdiction, whether by way of substantive action on the merits, emergency or provisional relief, injunction, enforcement or otherwise.

17.3. Service of process

Each party agrees that without preventing any other mode of service, any document in an action (including, but not limited to, a claim form or any other document to be served pursuant to the provisions of the French Code of Civil Procedure) may be served on any party at its address for service of notices under the present Agreement and each party undertakes to notify the other party in advance of any change from time to time of the details of such address in accordance with the manner prescribed for service of notices in the present Agreement.

ANNEX 2**Identification of the ISG**

- Name of the ISG: **Experiential Networked Intelligence (ENI)**

- Names of the ISG Founding Members:
 - **Huawei Technologies Co. Ltd UK**
 - **China Academy of Telecommunications Research of MIIT (CATR)**
 - **Samsung R&D Institute UK**
 - **SnT – University of Luxembourg**
 - **China Telecommunications**
 - **Xilinx Ireland**

Date of approval of the creation of the ISG and the initial Terms of Reference by the Director-General: **1st February 2017**

Date of approval of the extension of the period of activity of the ISG by the Director-General: **6 September 2022**

ISG RULES FOR INFORMATION

ANNEX 3

Authorized deviations from the ETSI Technical Working Procedures

In the following, deviations from the applicable ETSI Technical Working Procedures as agreed by the ISG Founding Members are stipulated.

1. Decision making

1.1. Principles of decision making

The ISG shall endeavour to reach Consensus on all issues, including the approval of draft ISG Group Reports and Group Specifications. If Consensus cannot be achieved, the ISG Chair can decide to take a vote which may be performed by a secret ballot. A vote may be conducted during an ISG meeting or by correspondence.

Where voting is used, vote results shall be evaluated by the ISG Chair on the basis of one (1) ISG Member, one (1) vote.

ISG Participants do not have the right to vote.

For all other decisions, except for the appointment of ISG Chair/Vice-Chairs and ISG Working Group Chairs, a proposal shall be deemed to be approved if seventy-one (71) % of the votes cast by the ISG Members are in favour.

Abstentions or failure to submit a vote shall not be included in determining the number of votes cast.

The ISG Chair of a physical or electronic meeting is responsible for distributing an ISG meeting report (minutes of the meeting), including Consensus results and vote results if any, within fifteen (15) days of the closing of the ISG meeting.

1.1.1. Voting during an ISG meeting

The following procedures apply for voting during an ISG meeting or an ISG Working Group meeting:

- before voting, a clear definition of the issues shall be provided by the ISG Chair;
- voting ISG Members shall only be entitled to one (1) vote per ISG Member (the voting weight shall be one (1) per voting ISG Member);
- on any matter brought to vote, the ISG Chair can be requested by any ISG Member or ISG Participant to note in the ISG meeting report the synopsis of any dissenting opinion in the meeting;
- if an ISG Member has more than one (1) representative present, only one (1) representative may vote;
- if manual voting procedures are used, each ISG Member may only cast the vote once;
- if electronic voting procedures are used, votes may be changed prior to the closure of the vote;
- ISG Members are only eligible for voting (voting Members) if they have been present during at least two (2) out of the previous three (3) physical meetings.
- ISG Founding Members as identified in the present Agreement shall be eligible to vote during and up to the end of the first three (3) physical meetings following the creation of the ISG. Thereafter they are subject to the above participation requirements as for all other ISG Members;
- the opinions of ETSI Counsellors should be noted;
- voting by proxy is not permitted;
- there are no quorum requirements;

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

1.1.2. Voting by correspondence

The following procedures apply for voting by correspondence:

- before voting, a clear definition of the issues shall be provided by the ISG Chair and disseminated to all on the ISG membership list;
- the voting period shall be defined by the ISG Chair and communicated to all on the ISG membership list;
- voting ISG Members shall only be entitled to one (1) vote per ISG Member (the voting weight shall be one (1) per voting ISG Member);
- votes may be changed prior to the closure of the vote;
- ISG Members are only eligible for voting (voting Members) if they have been present during at least two (2) out of the previous three (3) physical meetings;
- there are no quorum requirements;
- electronic voting only shall be used for voting by correspondence (e.g. the ETSI tool <https://portal.etsi.org/webapp/tbdecision3/Help/voting.asp>);
- at the end of the voting period, the ISG Chair shall count the votes using the majority described in **Article 1.1 of Annex 3** above;
- the result of the vote shall be disseminated to everybody on the ISG membership list within fifteen (15) days.

1.1.3. Voting for the election of an ISG Chair/Vice-Chair and/or ISG Working Group Chair

For the purpose of electing any ISG Chair/Vice-Chair and/or ISG Working Group Chair the procedures given in **Articles 1.1, 1.1.1 and 1.1.2 of Annex 3** shall apply.

In the case where there is more than one (1) candidate, a secret ballot shall be used. When, in the first ballot, no candidate has obtained more than fifty (50) % of the votes cast, a second ballot shall be held. The second ballot shall be held among the two (2) candidates who have obtained the highest number of votes in the first ballot. The candidate obtaining the higher number of votes in the second ballot is then elected.

In addition to performing his tasks in strict impartiality and in the interest of ETSI, the ISG Chair shall be responsible for the voting process and shall ensure that confidentiality is maintained.

If the vote is conducted during an ISG meeting only the final result shall be recorded in the ISG meeting report.

If the vote is conducted by correspondence only the final result of the vote shall be disseminated to the ISG membership list.

1.2. Appealing against an ISG Chair's decision

Any ISG Member who is against the ISG Chair's ruling on a vote may submit its case to the Director- General for decision. In such cases the ISG Member shall also inform the ISG Chair beforehand.

When the ISG Chair has made a ruling, his decision shall be taken as the basis for future operations, unless overturned by the Director-General.

2. Appointment of ISG Chair/Vice-Chairs and/or Working Group Chairs

The ISG Chair, Vice-Chairs and Working Group Chairs shall be appointed by the ISG Members for a period of two (2) years.

The appointment shall be confirmed by the Director-General.

After each period they may be re-appointed.

3. Participation in the work of an ISG

For information, the ISG Participant Agreement will be terminated if the ISG Participant has not participated in at least two (2) physical meetings of the ISG in a twelve (12) months period.

For information of the ISG Members, the ISG Chair shall periodically review the participation record of authorized ISG Participants and in addition, access to meeting documents, mailing lists etc. shall be removed from authorized ISG Participants if they fail to participate in, or register and pay meeting fees for two (2) successive meetings in the time period mentioned above.

Such access shall be restored upon registration for a subsequent meeting of the ISG.

4. Invitation to an ISG meeting

Electronic meetings of the ISG may be convened by the ISG Chair. The Chair of any ISG Working Group may convene an electronic meeting of the ISG Working Group.

The date and time of such electronic meetings shall be disseminated no less than one (1) week in advance by means of the ISG membership list, and preferably as the agreed closing action of the previous electronic meeting.

ANNEX 4**Terms of Reference (ToR) for
ETSI ISG Experiential Networked Intelligence (ISG ENI)**

Approved by the Director-General on **6 September 2022** following Board#139 consultation.

Scope

ENI focuses on improving the operator experience by the use of closed control loop mechanisms for different network operations. These mechanisms are based on context-aware, metadata-driven policies, and augmented by Artificial Intelligence (AI) learning and reasoning, to more quickly recognize and incorporate new and changed knowledge. This enables actionable decisions to facilitate prompt adaptation to various business and operational needs.

The main objectives of ISG ENI are listed as:

- To develop standards for a Cognitive Network Management system, incorporating one or more closed control loops. The closed loop control approach is based on extensions to the “observe-orient-decide-act” model (e.g., the incorporation of situation awareness, learning, and reasoning capabilities).
- To enable adapting the usage of available network resources and services of the envisaged Cognitive Network Management system, according to the real-time evolution of user needs, environmental conditions and business goals. The decisions taken are based on facts and inferences that use detailed state and telemetry information about network resources and services, along with the preferences of users and operators.
- To quantify the Operator Experience by introducing metrics and an associated evaluation procedure; closed control loops will enable the ENI System to optimize and adjust network resources and services using cognitive methods to maximize the Operator Experience.
- To specify different types of policies that will be used to drive adaptive behavioural changes by using various cognitive methods, including AI mechanisms.
- To create specifications of a modular and extensible ENI system, including AI mechanisms, which can be implemented in a phased approach to accelerate ICT’s adoption for existing and emerging systems/networks and technologies.
- To provide the ability of the ENI system to morph and adapt to the evolution of relevant AI mechanisms.
- To further elaborate standards that will address:
 - (1) the demonstration of Use Cases by using the System Architecture, and
 - (2) the requirements of the Operator Experience in and across multiple types of network infrastructures, including 5G networks, and
 - (3) the model-driven architecture, described by functional blocks and appropriate Reference Points and Interfaces, that supports adaptive and evidence-driven service operation through Cognitive Network Control and Management to provide the required Operator Experience.
- To provide a telemetry processing framework that uses context and situation awareness to learn and reason about which data should be collected using what types of processing mechanisms to support information collection and measurement about network performance, network resources and services.
- To support network security and privacy requirements, following what has already been done in PoC activities, in collaboration and strict alignment with other ETSI security groups including ISG SAI and TC CYBER.
 - Domain-specific Security is to be implemented in the domains that ENI is assisting.

- To launch additional Proof of Concept (PoC) activities, where PoC proposals shall address at least one goal relevant to ENI, related to an ENI Use Case, a set of ENI Requirements, and the demonstration of aspects of the ENI System Architecture, as specified in the ENI PoC Framework.
- To provide external Reference Points, along with APIs and DSLs, to be used for ENI to interact in an operator controlled manner with existing and emerging ICT systems. This promotes interoperability between ENI and Assisted Systems as well as migration towards AI-assisted ICT services.
- To evolve toward Plugtests and Hackathon events to test interoperability.

Areas of activity

The activities of ISG ENI are spread amongst the following areas:

- Revision/maintenance of already published documents,
- Specify additional use cases and requirements to reduce the integration complexity of incorporating recommendations and commands via an API broker for the operators' business and for some vertical industries,
- Architecture specification:
 - continue to develop a generic technology-independent system architecture of a network supervisory assistant system (specified in an earlier release)
 - updated versions of the Use Cases and Requirements specifications will be used to enhance the above system architecture, and
 - the system architecture will be based on extensions to the 'observe-orient-decide-act' control loop model with external and internal reference points and APIs, and
 - the system architecture will incorporate detailed situation awareness, learning, and reasoning capabilities, and
 - define an information model for the main objects in the System Architecture (in the next release), and
 - define one or more data models, based on the information model, for populating APIs (in the next release), and
 - continue enhancement of the System Architecture to include interfaces and protocols, detailed functional flow diagrams, sequence and interaction diagrams, state machine diagrams, Reference Points, and APIs (in the next release), and
 - specification of the difference in semantics for ENI policies (in the next release), and
 - enhanced procedures for processing Policies (specified in the next release), including:
 - Conflict detection and resolution between different Policies, and
 - Coordination between ENI Functional Blocks for supporting Policies applied to different parts of the infrastructure, and
 - knowledge management for Policies (specified in the next release), including:
 - How to implement, manage, and distribute different types of knowledge, and
 - Procedures for lifecycle management of knowledge, including import, update, delete, and query, and
 - interworking outlining the use of external reference points and APIs (activity envisaged for this and a future release),
- AI with relation to the ENI Architecture:
 - continue development of AI functional blocks that augment and enhance other functional blocks in the system architecture, and
 - evaluation and measurement of the effectiveness of different categories of AI (in this and the future release),
- Data mechanisms:
 - Describe high-level description of data mechanisms including data acquisition and processing (in this and the future release), and
 - study reactive In-situ flow information Telemetry (in this and the future release),
- PoC framework
 - increase of the number of PoCs, and

- recommend new PoCs to follow the ENI architecture, support the external Reference Points, and provide essential feedback to the design of the external Reference Points, and
- Enhanced adherence to Use cases and external reference points, demonstrating interworking, and
- preparation to evolve to ENI Plugtests and Hackathons (activities envisaged for the next release),
- Cooperation with internal entities
 - coordinated activities with security groups (including ETSI TC CYBER and ISG SAI), to ensure that all communications between ENI and Assisted Systems to operate securely (activity envisaged for this and the next release),

Outreach and engagement (collaboration with other stakeholders)

On the understanding that ISG ENI is a unique global venue that builds relationships between standards and R&D communities it is considered essential that the ISG engages as much as possible with representatives from the following classes of organisation:

- ETSI Member R&D and professional employees not devoted to standards development,
 - Liaising our specification with H2020 projects and other research entities with promotion and realization of workshops and other demos:
 - Demonstration of one or two use cases related with System Architecture in an earlier release, others in this and the next release.
- Non-member academic institutions and activities,
- Other standards body research arms and activities,
 - Liaising our specifications on AI or policy with the Linux Foundation and other Open Source Communities (OSCs) (activity envisaged for the next Release).
- Dissemination of the ENI concept foundations through several media/tutorial events.

Annex (informative): collaboration with other bodies

ISG ENI will set-up the appropriate communication channels to the following groups both within and outside of ETSI.

ETSI groups

- EPP 3GPP
- TC INT/AFI
- TC CYBER
- ISG NFV
- ISG ZSM
- ISG MEC
- ISG SAI
- ISG ETI
- ISG F5G
- ISG IPE
- OSG OSM

External groups

- ISO/IEC
- ITU-T
- BBF
- ONF/ONS
- IETF
- MEF
- TMForum
- CCSA
- OASIS
- CEC projects H2020/5GPPP
 - Horizon Europe
- Linux Foundation Networking
 - ONAP
 - Acumos
 - PNDA

If required, the ISG ENI may decide to establish additional liaison relationships.

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